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Europe Banks

M&A: The Need to Rationalise Through Consolidation, in a Buyers' Market

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No bank M&A for 12 years...

...with 2007 the latest M&A year of significance. This is changing – so far this year, two significant transactions have taken place. And speculation of future combinations abounds – of the 31 €-banks we cover, 20 have been subject to media M&A speculation.

So, why now?

Two main factors: (1) the operating environment, already challenging at the start of 2020, has materially worsened. Downward operating profit pressure and deteriorating credit quality leave cost cuts as the sole avenue to protect the bottom line; and (2) regulators have endorsed, and called for, further M&A. Consequently, the willingness of bank managements to consider various combinations has increased, in our view, and we see a rising probability of additional deals.

Defensive M&A...

Prior to 2008, the objective of bank M&A was to accelerate the expansion of banks' business portfolios, by adding new geographies and product lines. The current M&A cycle could not be more different. At its core, a single issue: an acute need to rationalise. This is particularly true for select smaller institutions.

...needs to have high cost reduction potential

We analyse all potential combinations among the 29 €-zone banks under review. Among 406 potential combinations, 81 (or 20%) have a geographic overlap >33%, which we see as a minimum condition for a (cost-cutting driven) combination. Potential combinations are predominantly domestic, though cross-border also features. We highlight banks that screen as potential targets and acquirers in multiple combinations, and incorporate the M&A-driven valuation into a sub-segment of banks.

Defensive M&A = potential value in targets & buyers

In a typical M&A cycle, the skew of near-term value opportunity is with the targets. The defensive nature of this M&A cycle, however, creates potential value opportunities for shareholders of targets and acquirers alike. We are Buy rated in European G-SIBs (ex DBK and SG) and add ABN to Buy (from Neutral).

Jernej Omahen
+44(20)7774-6324 | jernej.omahen@gs.com
Goldman Sachs International

Jean-Francois Neuez
+44(20)7552-9362 | jean-francois.neuez@gs.com
Goldman Sachs International

Anna Marshall
+44(20)7552-8394 | anna.marshall@gs.com
Goldman Sachs International

Thomas Dewasmes, CFA
+44(20)7552-5987 | thomas.dewasmes@gs.com
Goldman Sachs International

Alexandre Dupuy
+44(20)7774-3579 | alexandre.dupuy@gs.com
Goldman Sachs International

Gabriele Poy
+44(20)7552-4401 | gabriele.poy@gs.com
Goldman Sachs International

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Table of Contents

M&A: The Acute Need to Rationalise Through Consolidation, in a Buyers' market	3
Bank M&A: Media attention follows shift in stance among policymakers and banks	9
What type of M&A to expect: Domestic, but cross-border can be "domestic" too	11
Screening for potential combinations, hypothetical targets and acquirers	16
Methodology: Analysing 406 potential combinations, in a 6-step mechanical approach	20
Minimum criteria: Geographic overlap > 1/3	22
① Cost synergies: A range of 0-40%, driven primarily by geographic overlap	25
② Revenue attrition: From 0% to -3%, as a function of geographic and business mix overlap	32
③ Eligible Badwill = Badwill - Purchase Price Allocation (PPA)	38
④ Restructuring charges: Calibrated at 1.7x cost synergies, in line with historical median	42
⑤ Capital: CET1 and DIV policy of the acquirer remain unchanged after a combination	45
⑥ Market capitalisation & share of target acquired	47
Valuation: Incorporating the M&A components	48
Appendix: ECB's public consultation on consolidation an important step forward	58
Appendix: European banking M&A volumes have been stubbornly low since the start of the GFC	61
Appendix: Cost/Income ratios suggest further room for rationalisation	64
Rating and pricing information	67
Disclosure Appendix	68

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M&A: The Acute Need to Rationalise Through Consolidation, in a Buyers' market

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After no meaningful M&A among European banks for over a decade, 2020 has seen two large transactions, with media speculation abundant with potential combinations. We see this M&A cycle as distinctly defensive – faced with profitability headwinds, banks are under acute pressure to reduce costs. We look at all 406 potential combinations among 29 €-zone banks included in our analysis, but this number falls to 81 when we apply a minimum level of geographic overlap (which we set at 1/3). We apply additional criteria to these 81 combinations, to better differentiate on the basis of strategic and financial potential.

The defensive nature of this M&A cycle implies that value creation could materialise for shareholders of targets and acquirers alike.

Banks that most frequently screen as viable acquirers (see Exhibit 1) are large market cap names with extensive geographic reach. These overlap well with our current preferred exposures, with a large proportion Buy rated: BNP, UCG, ING, SAN (all CL), CAGR. We see a standalone value opportunity for these names, with any prospective transactions as a free option.

Banks that screen as potential junior partners (see Exhibit 1) in multiple combinations include smaller, domestically focused institutions in larger markets (BMPS, SABE, BPER, BPM, among others).

Note that the M&A analysis contained herein is for illustrative purposes; we take no view on the likelihood of any specific transaction materialising.

No M&A in 12 years…

No meaningful M&A has taken place among European banks in over a decade. The most recent large M&A year was 2007, with all but a handful of deep-distress combinations taking place since. Regulation, new capital requirements, sovereign crisis, barriers to movement of capital and liquidity all contributed to banks' re-assessment of their geographic and product footprint. This, in turn, frequently led to a reduced global ambition and retreat to core competencies and geographies.

…so, why now?

Following a decade of drought, two major combinations – ISP/UBI and CABK/BKIA – have materialised over the course of 2020. Media speculation abounds – of the 31 €-banks we cover, 20 have been subject to media M&A speculation. So, why now? In short, two significant factors have changed: (1) the operating environment has materially worsened; and (2) the regulators and policymakers have explicitly endorsed further consolidation.

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M&A: Growth acceleration gives way to an acute need to rationalise

In the period leading up to 2008, M&A served as a growth accelerator through which new geographies and product lines were added. Frequently, increased size was the prime objective. The product of this is the G-SIB banks of today. The M&A cycle currently under way could not be more different. At its core, a single issue: an acute need to rationalise. Downward revenue pressure, upward cost pressure (IT) and deteriorating credit quality are leading banks to re-consider M&A as a reasonable path to cut costs and protect the bottom line.

What's domestic, and what is cross-border?

In assessing potential combinations in the €-zone, two factors are important: geographic overlap, and relative size of the combining banks. They determine the scope for economies of scale, which in turn drive potential for cost synergies. Domestic M&A combinations are most likely on that basis. However, a combination of a domestic bank with a subsidiary of a universal bank, active in that market, can be equally attractive.

Assessing scope for M&A combinations – geographic overlap at the centre

The defensive nature of this M&A cycle puts scope for cost cuts at the centre, which is in turn primarily a function of geographic overlap. A combination within a single jurisdiction gives scope for (1) meaningful cost synergies, which should come with (2) limited revenue attrition, while keeping the increase in complexity at a moderate level. While scope for cost synergies is the central objective, three other broader factors stand to determine the attractiveness of a potential combination: (3) market valuation, which at current levels (valuations meaningfully below 1x tangible book value) drives (4) scope for badwill creation. Associated with cost synergies are (5) restructuring charges, which tend to be front loaded and add to the capital intensity of a potential combination. Finally, we assess the aspects of (6) capitalisation requirements.

Our framework: Analysing all potential combinations

The framework of our analysis is calibrated to examine all possible combinations among Euro area banks under our coverage. The starting point is therefore 29 banks[1], with a total of 406 potential combinations. Among these, we aim to identify (1) combinations which offer promising scope for cost synergies, as well as banks that screen as viable (2) targets and (3) acquirers, most frequently.

Among 406 total potential combinations, 81 meet our minimum criteria (geographic overlap > 1/3). And among the 29 banks under review, 24 screen as potential targets and 21 as acquirers in at least one combination.

[1] We cover 31 €-banks, but exclude Bankia in light of the announced transaction with CaixaBank, and exclude Unicaja after its announcement of merger negotiations with Liberbank (which we do not cover).

Among targets, as seen in Exhibit 7, banks which feature most frequently include BMPS, BPER, SABE, BPM, CBK. And among buyers, it is BNP, CAGR, DBK, ISP, ING, UCG and SAN (as seen in Exhibit 8).

Defensive M&A cycle = opportunity in targets, as well as buyers

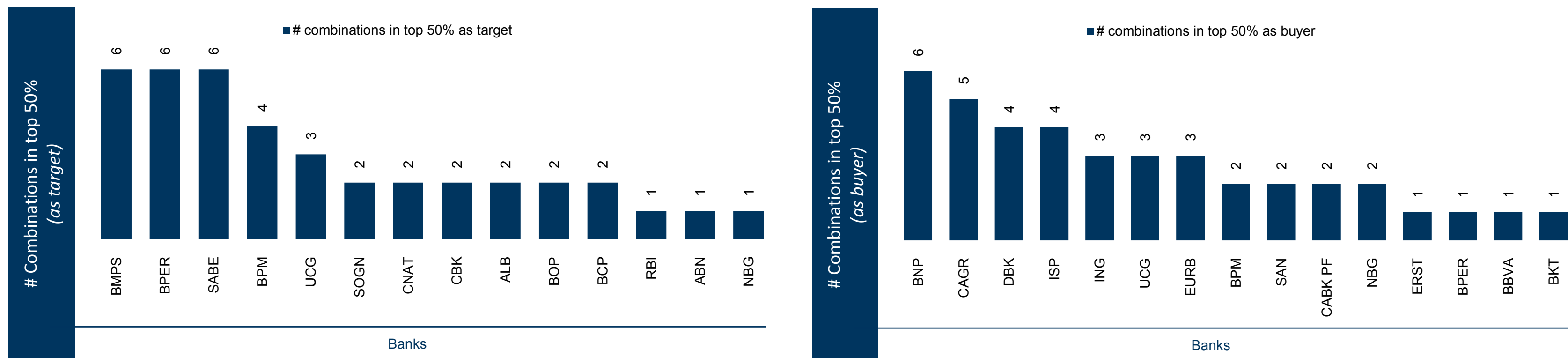
In a typical M&A cycle, the skew of near-term value potential is with the targets. The defensive nature of this M&A cycle, however, evens out this near-term value skew, creating potential value opportunities for shareholders of targets and acquirers alike. Consider transactions agreed so far this year, for example – they benefited shareholders of targets, through premiums to market value, while also being agreed on terms accretive to the buyer.

For the perceived targets, we have in the past expressed our expectation that an M&A cycle would start in Italy, through consolidation of the smaller banks, and we incorporated M&A premiums into potential targets, notably UBI and BPM (see: Reset street expectations & stabilized sovereign backdrop incrementally positive for smaller banks - Buy UBI/BBPM). Given the scope of the share price move for BPM, we downgrade it to Neutral in a separate note published today.

For potential acquirers, we do not incorporate any impact from potential future transactions into our valuation. This said, we see ample value in most European G-SIBs on a standalone basis, and the overlap with the results of this analysis is high: of the top banks that screen frequently as potential buyers, a large portion are Buy rated: BNP, UCG, ING, SAN (all CL), CAGR.

Exhibit 1: Among the 29 banks under review, 14 screen as viable targets and 15 as viable acquirers in at least one potential combination with a combined score in the top half

# of potential combinations where bank features as junior (left chart) or senior (right chart) partner in top 50% scores of our 81 combinations sample



CABK pro-forma for the acquisition of Bankia, based on transaction details announced by the company (for our latest combination analysis, see our note "Spain Banks: CaixaBank/Bankia: Reassuringly logical", September 21, 2020)

Source: Goldman Sachs Global Investment Research

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Rating changes

In separate notes published today, we upgrade ABN to Buy from Neutral and downgrade BPM to Neutral from Buy. Additionally, we reinstate our rating on BPER at Buy.

Our five criteria for stock selection

We have highlighted in previous research our five criteria for stock selection:

Our five criteria for stock selection: **(1) large banks** (preferably G-SIBs); **(2) geographically diversified**, thus avoiding concentration risk of a COVID-19 flare-up in any one country; **(3) diversified by product**, thus side-stepping uneven hits to any specific asset class; **(4) high profitability**, as an indicator of ongoing/organic loss-absorbing capacity; and **(5) high capitalisation**, as an indication of total loss-absorbing capacity. Our large-cap Buy names are BNP (on CL), CAGR, ING (on CL), KBC, ABN, SAN (on CL), BBVA, UBS, CS, UCG (on CL), HSBC and STAN.

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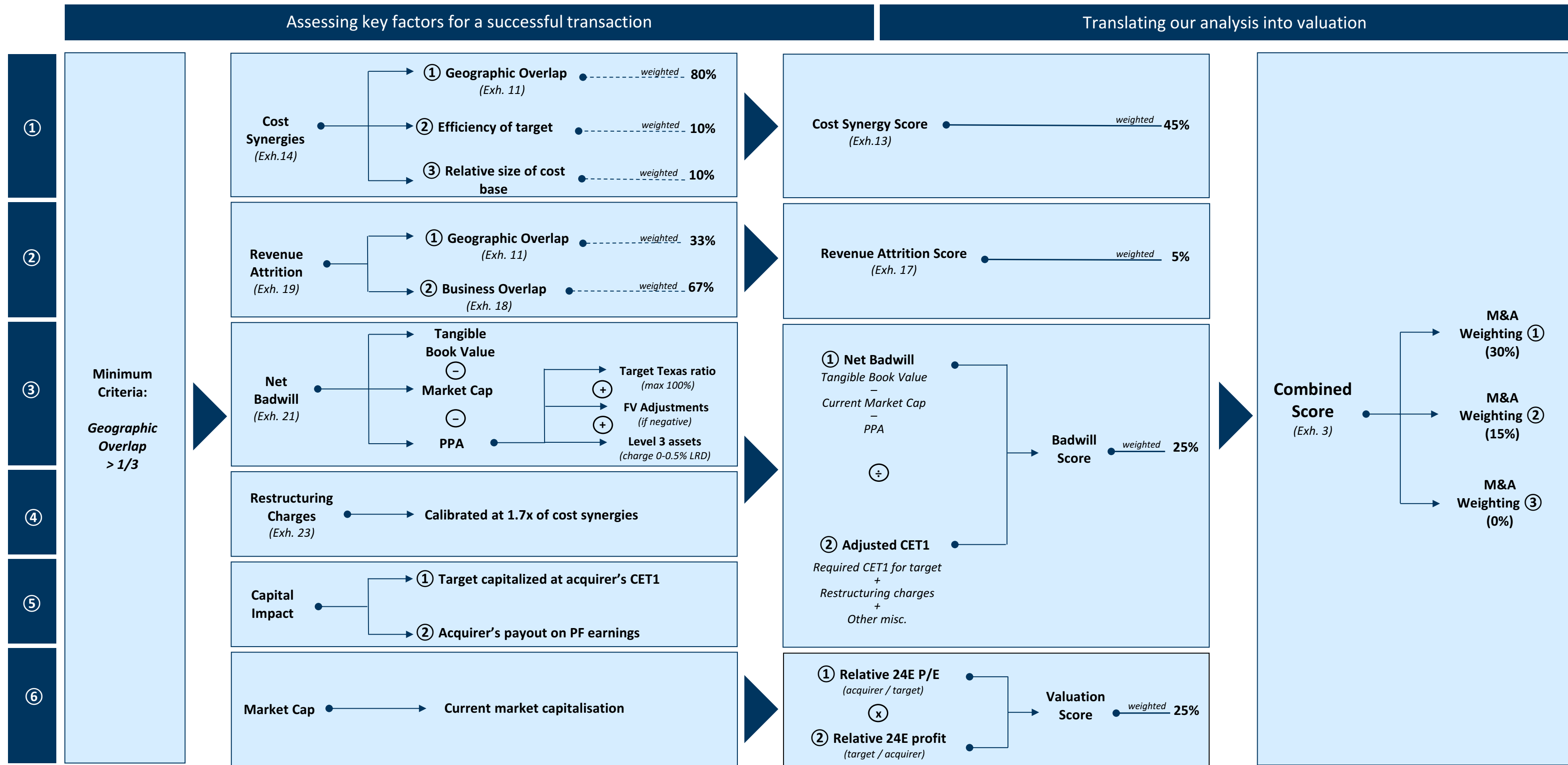
Exhibit 2: Overview of our methodology: meaningful geographic overlap as a pre-condition of any combination
Methodology and valuation



Source: Goldman Sachs Global Investment Research

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Exhibit 3: Overview of our assessment: 81 hypothetical combinations with geographic overlap >1/3

Combined score. Green indicates combined score as per previous exhibit with different shades corresponding to different quartiles. Market cap in € bn

Acquirer (including market capitalisation)		Target																																
		BOP	ALB	NBG	BCP	EURB	BMPS	SABE	BPER	BOI	AIB	BPM	BAWG	BKT	RBI	CBK	CNAT	ABN	ERST	SOGN	CABK PF	UCG	BBVA	DBK	KBC	CAGR	ING	SAN	ISP	BNP	# in Q1	# in Q2	# in Q3	# in Q4
BNP	€ 41.4	•	•	•	•	•				•	•				•			•	•		•		•					•		--	5	1	4	5
ISP	€ 30.7	•	•	•	•	•		•		•	•			•	•	•	•	•	•	•	•		•	•	•	•	•	•	--	--	2	2	•	1
SAN	€ 28.2	•	•	•		•	•		•	•	•	•			•			•	•	•		•			•	•		--	--	--	2	•	4	4
ING	€ 25.2	•	•	•	•	•	•		•	•	•	•			•				•	•	•	•	•			•	--	--	--	--	1	2	1	4
CAGR	€ 21.5	•	•	•	•	•		•		•	•		•	•	•	•		•	•		•	•	•	•	•	--	--	--	--	--	3	2	•	•
KBC	€ 18.6	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	•	•	1	•
DBK	€ 16.8	•	•	•	•	•	•	•		•	•	•			•			•	•	•	•		•	--	--	--	--	--	--	--	1	3	•	2
BBVA	€ 16.2	•	•	•	•	•	•		•	•	•	•	•		•	•		•	•	•		•	--	--	--	--	--	--	--	--	1	•	1	2
UCG	€ 15.8	•	•	•	•	•		•		•	•			•			•	•		•	•	--	--	--	--	--	--	--	--	--	•	3	3	1
CABK PF	€ 13.8	•	•	•		•	•		•	•	•	•	•		•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	1	1	1	•
SOGN	€ 10.8	•	•	•	•	•	•	•	•	•	•	•	•	•		•		•	•	--	--	--	--	--	--	--	--	--	--	--	•	•	2	•
ERST	€ 7.7	•	•	•	•	•	•	•	•	•	•	•		•		•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	•	1	1	•
ABN	€ 6.9	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	1	•
CNAT	€ 6.6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
CBK	€ 5.7	•	•	•	•	•	•	•	•	•	•	•		•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	1
RBI	€ 4.3	•	•	•	•	•	•	•	•	•	•	•		•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	1
BKT	€ 3.1	•	•	•	•	•	•		•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	1	•	•
BAWG	€ 3.0	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BPM	€ 2.5	•	•	•	•	•		•		•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	•	•	•
AIB	€ 2.5	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BOI	€ 2.0	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BPER	€ 1.8	•	•	•	•	•		•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	•	•	•
SABE	€ 1.6	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BMPS	€ 1.3	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
EURB	€ 1.2				•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	2	•	•
BCP	€ 1.2	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
NBG	€ 1.0			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	2	•	•
ALB	€ 0.8		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	1	•
BOP	€ 0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
# in Q1		•	1	•	1	•	5	4	4	•	•	1	•	•	•	1	•	1	•	2	•	•	•	•	•	•	•	•	•	•	20			
# in Q2		2	1	1	1	•	1	2	2	•	•	3	•	•	1	1	2	•	•	•	•	3	•	•	•	•	•	•	•	•		20		
# in Q3		1	•	•	•	•	•	•	•	•	•	•	2	3	3	3	4	•	•	•	1	•	1	•	•	1	1	•	•	•			20	
# in Q4		•	•	•	•	•	•	•	•	•	•	•	7	3	•	•	2	•	1	•	1	•	•	3	2	•	1	•	1	•				21

CABK pro-forma for the acquisition of Bankia, based on transaction details announced by the company (for our latest combination analysis, see our note "Spain Banks: CaixaBank/Bankia: Reassuringly logical", September 21, 2020)

Source: Goldman Sachs Global Investment Research

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Bank M&A: Media attention follows shift in stance among policymakers and banks

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European bank M&A peaked in 2007, but ground to a halt post the global financial crisis. Over the past 10 years, only a handful of notable combinations have taken place. This year, we observe a decisive shift in stance among policymakers and bank managements. Two major combinations have been announced, and reports of further potential combinations abound.

European bank M&A peaked in 2007, with €145 bn of completed combinations, of which cross-border deals accounted for over half. In 2008, the "crisis combinations" took place, with total volume of around €50 bn. With the onset of the European Sovereign crisis, however, the deal volume declined further, not exceeding €20 bn in any given year over the past decade.

2020 is the year when this changed. YTD, two major combinations have been announced. CaixaBank and Bankia announced plans to combine, while Intesa acquired UBI.

In addition to completed combinations, the conversation about an upcoming M&A cycle has become mainstream. Managements openly discuss the need, and inevitability, for further M&A, at industry conferences, earnings calls and AGMs. Various policymakers are calling for further consolidation. And media reports of further potential combinations abound.

Of the 29 €-zone banks included in our analysis, 18 (or 62%) have been the subject of various recent media reports discussing M&A. Moreover, recent media reports discussed no fewer than 22 M&A potential combinations, ranging from domestic to cross-border, and from small to large-scale (Exhibit 4).

The pick-up in the frequency of press reports has coincided with regulators being increasingly, and explicitly, supportive of consolidation in the banking sector (see: *Goldman Sachs European Financials Conference: Low visibility*, June 17, 2020). Most notably, the ECB launched a public consultation on the European banking consolidation, which we see as an important step forward, as we discuss later in this report (See Appendix: ECB's public consultation on consolidation an important step forward).

Exhibit 4: 22 potential combinations have featured in media reports

Potential combinations mentioned by the press recently; market cap in € bn

Acquirer (including market capitalisation)	Mkt cap	Target																												# Ment.
		BOP	ALB	NBG	BCP	EURB	BMPS	SABE	BPER	BOI	AIB	BPM	BAWG	BKT	RBI	CBK	CNAT	ABN	ERST	SOGN	CABK PF	UCG	BBVA	DBK	KBC	CAGR	ING	SAN	ISP	BNP	
BNP	€ 41.4	•	•	•	•	•	•	•	•	•	•	✓	•	•	•	✓	•	•	•	✓	•	•	•	✓	•	•	•	•	•	•	4
ISP	€ 30.7	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	--	•
SAN	€ 28.2	•	•	•	•	•	•	✓	•	•	•	•	•	•	•	✓	•	•	•	•	•	•	•	•	•	•	•	•	--	--	2
ING	€ 25.2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	✓	•	•	•	•	•	✓	•	•	•	•	•	--	--	--	2
CAGR	€ 21.5	•	•	•	•	•	✓	•	✓	•	•	✓	•	•	•	•	•	•	•	•	•	✓	•	•	•	•	--	--	--	--	4
KBC	€ 18.6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	•
DBK	€ 16.8	•	•	•	•	•	•	•	•	•	•	•	•	•	•	✓	•	•	•	✓	•	•	•	•	--	--	--	--	--	--	2
BBVA	€ 16.2	•	•	•	•	•	•	✓	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	1
UCG	€ 15.8	•	•	•	•	•	✓	•	•	•	•	✓	•	•	•	✓	•	•	•	✓	•	•	--	--	--	--	--	--	--	--	4
CABK PF	€ 13.8	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	•
SOGN	€ 10.8	•	•	•	•	•	•	•	•	•	•	•	•	•	•	✓	•	•	•	•	--	--	--	--	--	--	--	--	--	--	1
ERST	€ 7.7	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	•
ABN	€ 6.9	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	•
CNAT	€ 6.6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	•
CBK	€ 5.7	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•
RBI	€ 4.3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•
BKT	€ 3.1	•	•	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•
BAWG	€ 3.0	•	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•
BPM	€ 2.5	•	•	•	•	•	✓	•	✓	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2
AIB	€ 2.5	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•
BOI	€ 2.0	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•
BPER	€ 1.8	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•
SABE	€ 1.6	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•
BMPS	€ 1.3	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•
EURB	€ 1.2	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•
BCP	€ 1.2	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•
NBG	€ 1.0	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•
ALB	€ 0.8	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•
BOP	€ 0.4	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•
# of mentions		•	•	•	•	•	3	2	2	•	•	3	•	•	•	6	•	•	•	3	•	2	•	1	•	•	•	•	•	•	22

Out of the 22 potential combinations mentioned by the press, 5 do not meet our geographic overlap > 1/3 threshold, and are not considered in our screening analysis.

Source: Various media reports, Data compiled by Goldman Sachs Global Investment Research

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What type of M&A to expect: Domestic, but cross-border can be "domestic" too

In the period leading up to 2008, M&A served as a growth accelerator through which new geographies and product lines were added. Frequently, increased size was the prime objective. The product of this is the G-SIB banks of today. The M&A cycle currently under way could not be more different. At its core, a single issue: an acute need to rationalise. Downward revenue pressure, upward cost pressure (IT) and deteriorating credit quality are leading banks to re-consider M&A as a reasonable path to cut costs and protect the bottom line.

In assessing potential combinations in the €-zone, two factors are important: geographic overlap and relative size of the combining banks. They determine the scope for economies of scale, which in turn drive potential for cost synergies. Domestic M&A combinations are most likely on that basis. However, a combination of a domestic bank with a subsidiary of a universal bank, active in that market, can be equally attractive. In theory, this would constitute a cross-border combination, but for all practical purposes it would indeed amount to a domestic combination.

We think through the following combinations:

- **Domestic M&A:**
  - Market leader acquiring/absorbing a smaller institution.
  - Two mid-sized banks combining, to create a national champion.
  - Two large domestic banks combining.
- **Cross-border M&A, but within the Eurozone:**
  - Extensive geographic overlap with target: A potential "domestic" combination, between a domestic bank and a domestic subsidiary of a larger institution.
  - "Pure cross-border", or an addition of an altogether new geography.
  - A series of domestic combinations, but without full geographic overlap.
  - Cross-border combinations involving non-€ banks.

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Exhibit 5: Two factors are important: geographic overlap and relative size of the combining banks

	Full overlap		*Partial overlap*		*No overlap*	
	① Domestic	② Cross Border	① Domestic	② Cross Border	① Domestic	② Cross Border
Large acquirer relative to target	Leader absorbing a smaller instutiton ✓✓	A "purely domestic" merger, where there is a full geographic overlap ✓ *Potentially subject to antitrust & SI Buffers consideration*		A series of "domestic transactions", but without full geographic overlap ×		"Pure cross-border", or an addition of an altogether new geography ×
Two mid-sized banks	Two banks creating a national champion ✓					
Two large banks	Two large domestic banks merging ×					

Source: Goldman Sachs Global Investment Research

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1 Domestic M&A: Synergies of scale make further transactions likely

Domestic M&A, or a combination of two banks with substantially all of their operations in the same country, is therefore the most natural option. Indeed, recently announced combinations fall into this category. Synergy potential here is meaningful, as we show in detail later on. The Caixa/Bankia combination, announced in September, carried a cost synergy of 43% of the target's cost base.

Domestic M&A can take three forms, which are dependent on the size of the acquirer and target.

- **Market leader absorbing a smaller institution.** Large European banking markets tend to share a similar market structure: 2-3 market leaders (national champions), followed by a longer tail of smaller institutions. The process of absorbing a meaningfully smaller bank into a market-leading entity is, in our view, the one that offers significant synergy potential at very limited risk of rising complexity. We see combinations of this type as likely, particularly where the profitability of a smaller bank is challenged.
- **Two mid-sized banks combining, to create a national champion.** Prior to the combination with Bankia, CaixaBank was already a market leader. Post the combination, it will become the undisputed market leader in Spain, and by some margin. The cost synergy potential announced alongside the combination was 43% of Bankia's cost base, underlining the scope for cost synergies. This type of combination is also possible, in our view.
- **Two large domestic banks combining.** Recently, media has reported possibilities for market-leading banks in Switzerland (UBS/CS, *Paradeplatz, September 14, 2020*) as well as France (BNP/SG, *Les Echos September 30, 2020*) to combine. Theoretically, this type of combination would yield all the benefits of a domestic combination. In practice, however, multiple risks exist. These risks can be successfully managed, but they should also be acknowledged as increasing the hurdle beyond the two types of domestic combinations discussed above. We see three main complications to two national champions combining:
    - **Capital requirements.** Most "national champions" are systemically important banks (G-SIBs), with an extensive balance sheet size; combining them would increase the G-SIB buffers, resulting in capital requirements rising beyond those currently in place.
    - **Revenue attrition.** National champions tend to be direct competitors, with a significant overlap among the (large) corporate client base. In the event of a combination, these corporates would likely look to maintain a banking relationship with more than one institution, potentially choosing to move their business to a third-party bank. This type of 'large-scale' domestic combination would likely lead to meaningful incremental revenue loss. This revenue attrition creates opportunities for competitors that are not disrupted.
    - **Complexity/execution risk.** National champions are large and complex, and combining them would increase that complexity still further. In turn, this could lead to disruption beyond the levels that typically accompany M&A.

❷ Cross-border M&A within the Eurozone: Between probable and likely

The general thinking is that "domestic" combinations are value creative, but "cross-border" are not. We disagree – principally as we believe it is a mistake to label an M&A combination "domestic" or "cross-border", on the basis of the domicile of the headquarters. Rather, it is the geographic overlap in countries of operation that will determine the "domestic" or "cross-border" nature of the combination. In this sense, a "cross-border" M&A combination within the Eurozone can take three forms, depending on the extent of geographic overlap:

- **A "purely domestic" combination, where there is a full geographic overlap**. Take Unicredit, for example. Unicredit is domiciled in Italy but operates large banks across the Eurozone, including leading banks in Germany and Austria. Were Unicredit to engage in a combination with a bank that operates solely in Germany (or Austria), that would indeed classify as a cross-border combination in name, but would be a "purely domestic" combination in every practical sense. Cost synergy potential would be equal to that of a domestic combination, and the complexity of the organisation would not rise as a consequence.

- **"Pure cross-border", or an addition of an altogether new geography**. Cross-border M&A, without prior geographic overlap, is a different proposition altogether. This would imply adding a geography to the existing portfolio of operations, leading to (virtually) no cost synergy potential, and an increase of complexity. Staying with the example of Unicredit – an acquisition of, say, a pure-play bank in Sweden would be one without overlap and thus without obvious synergy potential. In this case, the management of the acquiring bank would need to believe that it can run the target's business meaningfully better.

- **A series of domestic combinations, but without full geographic overlap**. Larger banks in Europe tend to operate in multiple jurisdictions. As such, a combination between two large institutions would likely bring some, but not the full, benefits of domestic M&A. In overlapping geographies, economies of scale and thus synergy potential exists; but these are largely absent elsewhere across the countries of operation. This said, two institutions combining in this way always have the option of disposals in select markets, as an effective tool to reduce unwanted geographic presence.

- **The role of the European Bank Union (BU) completion: a pre-condition for "pure" cross-border M&A**. All in, the completion of the BU is the single most important precondition for banks to consider adding new geographies to their existing portfolios.

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European bank cross-border presence was, almost without exception, formed prior to the European sovereign crisis of 2011/12. During the period leading up to 2011/12, banks essentially operated on the assumption that Europe has a single banking market, and looked for opportunities to grow in those nation states that offered significant potential. Sovereign risk of various states traded at the same levels, and banks within the Eurozone frequently managed their ALM portfolios with non-domestic bonds, which offered marginal yield pick-up. In 2011/12 this changed, with banks retreating to their home markets and basic business models.

Completion of the bank union has the capacity to redefine the "home market" from that of a single nation state, to that of the Eurozone as a whole. In a nutshell, a completed BU would reduce systemic risk (COE↓), remove barriers to cross-border flow of funds (growth↑) and introduce incentives for cross-border banking (M&A↑).

In short, we see completion as a precondition for the Eurozone banks to consider cross-border expansion to markets where they do not currently operate. We wrote about this extensively in Europe: Banks: Bank Union Completion: Light at the end of the tunnel; positive (November 8, 2019).

❸ Cross-border combinations involving non-€ banks

A number of European banks are domiciled in the €-zone, but have a substantial portion of their business outside of the EU. Areas of important presence include Asia, Latam and the US. The underperformance of European banks has opened a valuation gap which could make European banks the subject of stake building. This would not be a new process.

Past examples include Deutsche Bank, where HNA took a 10% stake, and Qatari investors 6%. HSBC has recently seen its largest shareholder, Ping An, increase its stake marginally from 8.95% to 9%.

In most case, valuations (relative and absolute) have moved so significantly that establishing a meaningful stake in EM-exposed (but €-zone domiciled) would require meaningfully less financial spend now than in the past.

This said, while we see investment in the form of minority stakes as possible, we see a full take-over as unlikely, primarily due to regulatory constraints.

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Screening for potential combinations, hypothetical targets and acquirers

The framework of our analysis is calibrated to examine all possible combinations among Euro area banks under our coverage. The starting point is therefore 29 banks, with a total of 406 potential combinations. Among these, we aim to identify (1) combinations which offer promising scope for cost synergies, as well as banks that screen as viable (2) targets and (3) acquirers, most frequently.

Among 406 total potential combinations, 81 meet our minimum criteria (geographic overlap > 1/3). We apply our analysis to these 81 combinations, following a 6-factor methodology (see Methodology: Analysing 406 potential combinations, in a 6-step mechanical approach), which yields an overall score for a potential combination. We then differentiate amongst the top and bottom half of all assessed combinations.

Among the 29 banks under review, 24 screen as viable targets and 21 as viable acquirers in at least one potential combination. Among targets, the banks which feature most frequently are BMPS, SABE, BPER and BPM. And among buyers, BNP, CAGR, DBK, ISP, ING, UCG and SAN feature heavily. We lay out the flow of our analysis in Exhibit 2, and discuss the methodology in detail later on (see Methodology: Analysing 406 potential combinations, in a 6-step mechanical approach).

Note that the M&A analysis contained herein is for illustrative purposes; we take no view on the likelihood of any specific transaction materialising.

1 Suitable combinations: a geographic overlap of at least 1/3, high overall score

Our framework allows us to assess potential combinations on the basis of the factors laid out in the methodology section, whereby geographic overlap, as the primary driver of cost synergies, is both a pre-condition, as well as the most important factor in further analysis. In our view, the defensive nature of this M&A cycle calls for geographic overlap, and therefore scope for cost-cutting, to be placed at the centre of our analysis.

Among 406 potential combinations, 81 meet the minimum criteria for geographic overlap (calibrated at >1/3 of the target's EAD). We further analyse these 81 combinations on the basis of 6 criteria (scope for cost synergies, risk of revenue attrition, eligible badwill, restructuring charges, capital requirements, and relative market cap/valuation).

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Exhibit 6: Overview of our assessment: 81 hypothetical combinations with geographic overlap >1/3

Combined score; Green indicates combined score as per exhibit 2 with different shades corresponding to different quartiles; market cap in € bn

Acquirer (including market capitalisation)		Target																																
		BOP	ALB	NBG	BCP	EURB	BMPS	SABE	BPER	BOI	AIB	BPM	BAWG	BKT	RBI	CBK	CNAT	ABN	ERST	SOGN	CABK PF	UCG	BBVA	DBK	KBC	CAGR	ING	SAN	ISP	BNP	# in Q1	# in Q2	# in Q3	# in Q4
BNP	€ 41.4	•	•	•	•	•				•	•				•			•	•		•		•					•		--	5	1	4	5
ISP	€ 30.7	•	•	•	•	•		•		•	•			•	•	•	•	•	•	•	•		•	•	•	•	•	•	--	--	2	2	•	1
SAN	€ 28.2	•	•	•		•	•		•	•	•	•			•			•	•	•		•			•	•		--	--	--	2	•	4	4
ING	€ 25.2	•	•	•	•	•	•		•	•	•	•			•				•	•	•	•	•			•	--	--	--	--	1	2	1	4
CAGR	€ 21.5	•	•	•	•	•		•		•	•		•	•	•	•		•	•		•	•	•	•	•	--	--	--	--	--	3	2	•	•
KBC	€ 18.6	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	•	•	1	•
DBK	€ 16.8	•	•	•	•	•	•	•		•	•	•			•			•	•	•	•		•	--	--	--	--	--	--	--	1	3	•	2
BBVA	€ 16.2	•	•	•	•	•	•		•	•	•	•	•		•	•		•	•	•		•	--	--	--	--	--	--	--	--	1	•	1	2
UCG	€ 15.8	•	•	•	•	•		•		•	•			•			•	•		•	•	--	--	--	--	--	--	--	--	--	•	3	3	1
CABK PF	€ 13.8	•	•	•		•	•		•	•	•	•	•		•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	1	1	1	•
SOGN	€ 10.8	•	•	•	•	•	•	•	•	•	•	•	•	•		•		•	•	--	--	--	--	--	--	--	--	--	--	--	•	•	2	•
ERST	€ 7.7	•	•	•	•	•	•	•	•	•	•	•		•		•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	•	1	1	•
ABN	€ 6.9	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	1	•
CNAT	€ 6.6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
CBK	€ 5.7	•	•	•	•	•	•	•	•	•	•	•		•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	1
RBI	€ 4.3	•	•	•	•	•	•	•	•	•	•	•		•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	1
BKT	€ 3.1	•	•	•	•	•	•		•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	1	•	•
BAWG	€ 3.0	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BPM	€ 2.5	•	•	•	•	•		•		•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	•	•	•
AIB	€ 2.5	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BOI	€ 2.0	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BPER	€ 1.8	•	•	•	•	•		•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	•	•	•
SABE	€ 1.6	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BMPS	€ 1.3	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
EURB	€ 1.2				•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	2	•	•
BCP	€ 1.2	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
NBG	€ 1.0			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	2	•	•
ALB	€ 0.8		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	1	•
BOP	€ 0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
# in Q1		•	1	•	1	•	5	4	4	•	•	1	•	•	•	1	•	1	•	2	•	•	•	•	•	•	•	•	•	•	20			
# in Q2		2	1	1	1	•	1	2	2	•	•	3	•	•	1	1	2	•	•	•	•	3	•	•	•	•	•	•	•	•		20		
# in Q3		1	•	•	•	•	•	•	•	•	•	•	2	3	3	3	4	•	•	•	1	•	1	•	•	1	1	•	•	•			20	
# in Q4		•	•	•	•	•	•	•	•	•	•	•	7	3	•	•	2	•	1	•	1	•	•	3	2	•	1	•	1	•				21

CABK pro-forma for the acquisition of Bankia, based on transaction details announced by the company.

Source: Goldman Sachs Global Investment Research

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❷ Potential targets: primarily (1) smaller & domestically focused; (2) small/mid market cap; and (3) geographic presence in markets where international banks are already active

In our analysis, any bank can be considered a target, in a potential combination, assuming two conditions are met: (1) the bank is the smaller of the two, in any given combination (ie a smaller market cap bank cannot acquire a larger one); and (2) it has a geographic EAD mix which results in at least 1/3 EAD overlap with that of the larger bank. After clearing these two hurdles, we calculate the combined score of a potential combination. We finally rank the banks by the highest number of combinations where they could participate as a junior partner on this basis.

Of the 29 banks in our sample, 5 (17%) banks do not feature as a suitable target in any of the combinations under review, while we identify at least one combination for 24 (83%) banks. We distinguish among banks where the minimum conditions for a combination (>1/3 EAD overlap) are met, but where the rest of the criteria point to a less attractive outcome.

Banks that screen favourably as potential targets are those with **(1) & (2) a small/mid market cap**, with a heavy **focus on a single domestic market**. Unsurprisingly, among the top 5, 4 are pure-play domestic banks (BPER, BMPS, SABE, BPM). However, **(3)** also **large banks, where market value has fallen sharply,** and which operate in multiple geographies, feature frequently (CNAT, UCG, SOGN).

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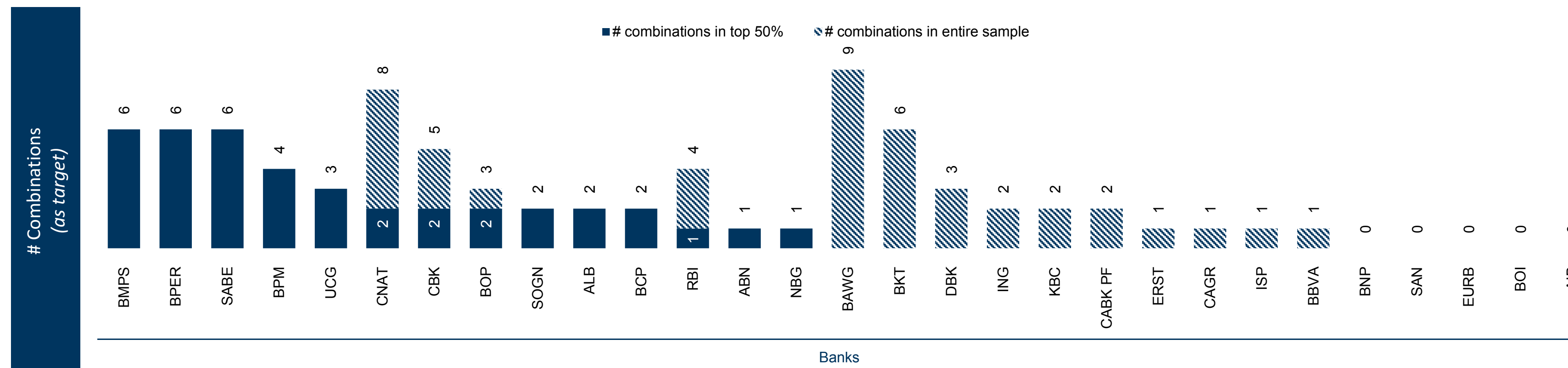
Exhibit 7: Analysing potential targets: Alongside domestic banks (especially in Italy and Spain), select larger banks also feature
Targets: # of potential combinations where bank features as a junior partner in (i) top 50% scores of our 81 combinations sample and (ii) entire sample



CABK pro-forma for the acquisition of Bankia, based on transaction details announced by the company.

Source: Goldman Sachs Global Investment Research

❸ Potential acquirers: Larger banks, with a broad geographic presence

In a typical M&A cycle, the skew of near-term value potential is with the targets. The defensive nature of this M&A cycle, however, evens out this near-term value skew, creating potential value opportunities for shareholders of targets and acquirers alike. Consider transactions agreed so far this year, for example - they benefited shareholders of targets, through premiums to market value, while also being agreed on terms accretive to the buyer.

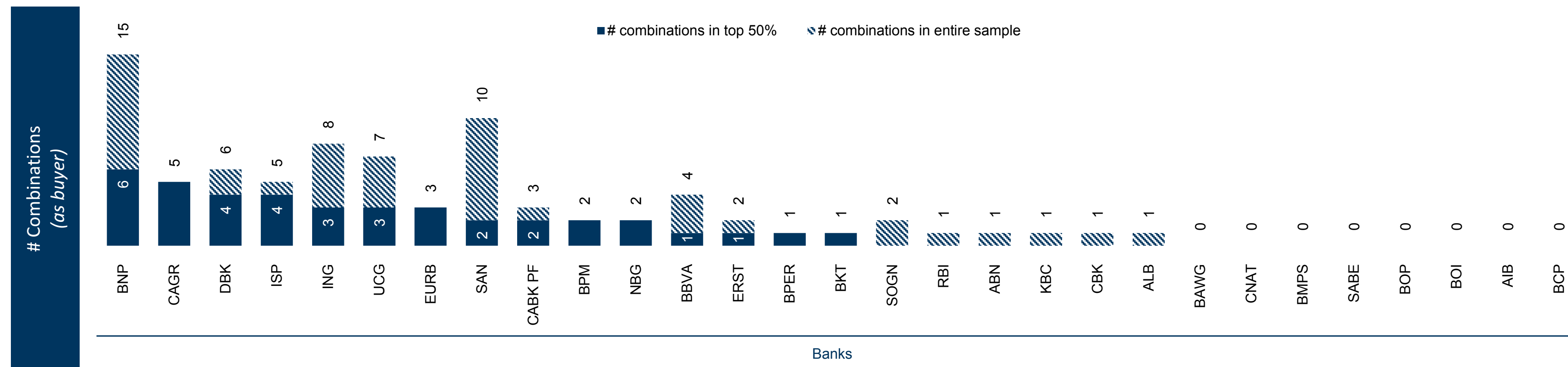
We consider any bank a potential acquirer, in a hypothetical combination, if two conditions are met: (1) the bank is the larger of the two, in any given combination; and (2) the target has a geographic EAD mix which results in an over 1/3 overlap.

Of the 29 banks in our sample, 8 (28%) banks do not feature as a potential acquirer in any of the combinations under review, while we identify at least one combination for 21 (72%) banks.

Banks that screen favourably as potential acquirers are those with a large market cap which operate in multiple geographies. Unsurprisingly, among the top 5, 4 are G-SIBs (BNP, CAGR, DBK and ING).

Exhibit 8: Analysing potential acquirers: Large banks, with pan €-zone presence

Acquirers: # of potential combinations, where bank features as senior partner in (i) top 50% scores of our 81 combinations sample and (ii) entire sample



CABK pro-forma for the acquisition of Bankia, based on transaction details announced by the company.

Source: Goldman Sachs Global Investment Research

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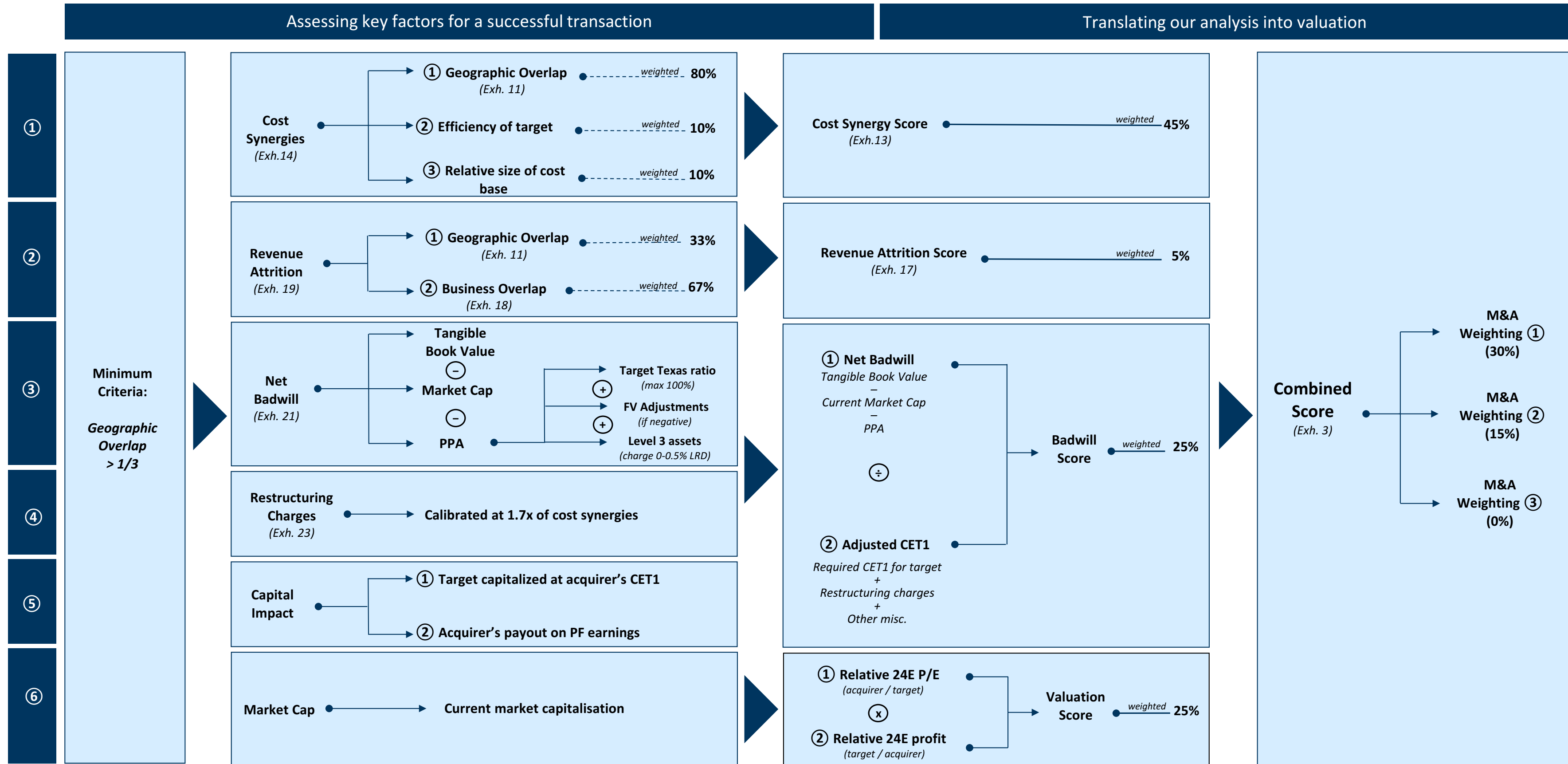
Methodology: Analysing 406 potential combinations, in a 6-step mechanical approach

Exhibit 9: Overview of our methodology
Methodology and valuation



Source: Goldman Sachs Global Investment Research

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Our analysis relies on a standardised combination model that we extrapolate to examine all possible combinations between Euro area banks under our coverage. We include 29 of the 31 €-zone banks under our coverage[2], which results in 406 potential combinations.

The analysis is based on a common set of assumptions for all potential combinations, and harmonised data inputs (as per the EBA database). Purposely, we aim for our analysis to be mechanical and see it as a broader M&A screen, the aim of which is to directionally gauge the financial feasibility of potential combinations. Of course, all potential combinations will incorporate nuances, which can substantially alter the financial outcome. For example, we do not take into account components that could change the nature of potential combinations altogether: market share & antitrust issues, increase in complexity of combined entity, disposals, etc.

Our analysis is based on 6 sets of key assumptions. To each of these assumptions we either (1) assign a value which we keep constant (e.g., we model for all combinations being for 100% of target entity, at current market capitalisation) or (2) use a mechanical framework, with consistent inputs, to drive the range of assumptions (e.g., cost synergies).

Our 6 key sets of assumptions are:

(1) Cost synergies. We assign a range of 0-40%, based on geographic overlap, efficiency levels and relative sizes of operating costs between the two entities engaged in the potential combination.

(2) Revenue attrition. We assume the best case scenario to be a revenue neutral combination. Our revenue attrition range is therefore calibrated between -3% and 0%.

(3) PPA & Badwill. We model for initial full badwill recognition, with PPA a function of credit quality, FV items & Level 3 assets.

(4) Restructuring charges. We set restructuring charges at 1.7x of the targeted cost synergies (in line with historical median).

(5) Capitalisation. Target is capitalised at the level of the acquirer.

(6) Current market valuations.

We describe each of the assumptions in more detail below, and also explain it using the example of a hypothetical DBK/CBK combination.

[2] We cover 31 €-banks, but exclude Bankia in light of the announced transaction with CaixaBank, and exclude Unicaja after its announcement of merger negotiations with Liberbank (which we do not cover). We consider CaixaBank numbers pro-forma for the acquisition of Bankia, based on transaction details announced by the company (see CaixaBank/Bankia: Reassuringly logical, September 21, 2020 for our latest combination analysis)

Minimum criteria: Geographic overlap > 1/3

The framework of our analysis is calibrated to examine all possible combinations amongst Euro area banks under our coverage. The starting point is therefore 29 banks, with a total of 406 potential combinations. It allows us to assess potential combinations on the basis of the factors laid out in this section, whereby geographic overlap, as the primary driver of cost synergies, is both a pre-condition for further analysis as well as the most important factor in further analysis. In our view, the defensive nature of this M&A cycle calls for geographic overlap, and therefore scope for cost-cutting, to be placed at the centre of our analysis. As such, we establish a minimum criterion of EAD overlap > 1/3[3]. Among 406 total potential combinations, 81 meet our minimum criterion.

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[3] We exclude the Irish banks from the geographical overlap associated synergies, as banks tend to have exposures in Ireland, but very little costs associated with them.

Exhibit 10: Geographic breakdown: Smaller banks tend to be more exposed to the domestic market while larger institutions are more geographically diversified

Geographic distributions of EAD among main EU and non EU countries where Eurozone banks are present (%). Deeper shades of green indicate higher proportion of banks' EAD in the country. Market cap in € bn

Countries — EU

Banks	Market cap	AT	BE	BG	HR	CY	CZ	FR	DE	GR	HU	IE	IT	LU	NL	PL	PT	RO	SK	ES	SE
BNP	€ 41.4	•	14%	•	•	•	•	27%	3%	•	•	•	11%	3%	2%	2%	•	•	•	3%	•
ISP	€ 30.7	•	•	•	2%	•	•	1%	1%	•	•	•	78%	1%	•	•	•	•	3%	1%	•
SAN	€ 28.2	•	•	•	•	•	•	2%	4%	•	•	•	•	•	•	4%	4%	•	•	23%	•
ING	€ 25.2	•	11%	•	•	•	•	3%	13%	•	•	•	•	2%	24%	3%	•	•	•	3%	•
CAGR	€ 21.5	•	•	•	•	•	•	43%	3%	•	•	•	12%	2%	2%	•	•	•	•	•	•
KBC	€ 18.6	•	59%	2%	•	•	18%	1%	1%	•	3%	6%	•	•	1%	•	•	•	5%	•	•
DBK	€ 16.8	•	•	•	•	•	•	1%	44%	•	•	•	5%	2%	3%	•	•	•	•	4%	•
BBVA	€ 16.2	•	•	•	•	•	•	1%	1%	•	•	•	1%	•	•	•	•	•	•	40%	•
UCG	€ 15.8	11%	•	•	•	•	3%	1%	22%	•	•	•	35%	•	•	•	•	•	•	1%	•
CABK PF	€ 13.8	•	•	•	•	•	•	1%	•	•	•	•	0%	•	•	•	6%	•	•	89%	•
SOGN	€ 10.8	•	•	•	•	•	5%	51%	4%	•	•	•	3%	2%	•	•	•	•	•	•	•
ERST	€ 7.7	49%	•	•	4%	•	19%	0%	2%	•	3%	•	•	•	•	•	•	5%	9%	•	•
ABN	€ 6.9	•	1%	•	•	•	•	2%	2%	•	•	•	•	1%	80%	•	•	•	•	•	•
CNAT	€ 6.6	•	•	•	•	•	•	32%	•	•	•	•	3%	5%	3%	•	•	•	•	3%	•
CBK	€ 5.7	•	•	•	•	•	•	2%	66%	•	•	•	1%	•	1%	10%	•	•	•	1%	•
RBI	€ 4.3	16%	•	4%	3%	•	12%	•	5%	•	4%	•	•	•	•	3%	•	7%	11%	•	•
BKT	€ 3.1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	11%	•	•	88%	•
BAWG	€ 3.0	55%	•	•	•	•	•	1%	17%	•	•	5%	•	•	1%	•	•	•	•	4%	1%
BPM	€ 2.5	•	•	•	•	•	•	0%	•	•	•	•	98%	•	•	•	•	•	•	0%	•
AIB	€ 2.5	•	•	•	•	•	•	1%	0%	•	•	75%	•	•	•	•	•	•	•	0%	•
BOI	€ 2.0	•	0%	•	•	•	•	1%	•	•	•	53%	•	•	•	•	•	•	•	0%	•
BPER	€ 1.8	•	•	•	•	•	•	0%	0%	•	•	•	98%	•	0%	•	•	•	•	0%	•
SABE	€ 1.6	•	•	•	•	•	•	1%	•	•	•	•	0%	•	•	•	0%	•	•	60%	•
BMPS	€ 1.3	•	•	•	•	•	•	•	•	•	•	•	98%	•	•	•	•	•	•	0%	•
EURB	€ 1.2	•	•	8%	•	2%	•	•	0%	84%	•	•	•	•	•	•	•	•	•	•	•
BCP	€ 1.2	•	•	•	•	•	•	1%	•	•	•	•	•	•	1%	29%	64%	•	•	•	•
NBG	€ 1.0	•	•	•	•	•	•	•	•	87%	•	•	•	•	•	•	•	•	•	•	•
ALB	€ 0.8	•	•	•	•	2%	•	0%	0%	78%	•	•	0%	•	•	•	•	8%	•	•	•
BOP	€ 0.4	•	•	•	•	•	•	•	•	91%	•	•	0%	•	•	•	•	•	•	•	•

Countries — Non EU

Banks	AU	BR	CL	CO	IN	JP	MK	MH	MX	MZ	PE	RU	CS	SG	CH	TR	GB	US	OTH
BNP	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	5%	13%	17%
ISP	•	•	•	•	•	•	•	•	•	•	•	2%	•	•	•	•	1%	2%	8%
SAN	•	9%	4%	•	•	•	•	•	3%	•	•	•	•	•	•	•	30%	10%	7%
ING	6%	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	3%	12%	20%
CAGR	•	•	•	•	•	1%	•	•	•	•	•	•	•	•	1%	•	3%	8%	25%
KBC	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1%	•	4%
DBK	•	•	•	•	2%	•	•	•	•	•	•	•	•	•	2%	•	3%	18%	16%
BBVA	•	•	•	3%	•	•	•	•	14%	•	4%	•	•	•	•	9%	1%	17%	8%
UCG	•	•	•	•	•	•	•	•	•	•	•	3%	•	•	•	4%	1%	2%	17%
CABK PF	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1%	0%	3%
SOGN	•	•	•	•	•	1%	•	•	•	•	•	3%	•	•	1%	•	4%	9%	18%
ERST	•	•	•	•	•	•	•	•	•	•	•	•	1%	•	•	•	0%	•	7%
ABN	•	•	•	•	•	•	•	•	•	•	•	•	•	1%	1%	•	2%	3%	6%
CNAT	•	•	•	•	•	1%	•	•	•	•	•	•	•	4%	4%	•	4%	16%	25%
CBK	•	•	•	•	•	0%	•	•	•	•	•	•	•	•	2%	•	5%	5%	8%
RBI	•	•	•	•	•	•	•	•	•	•	•	14%	•	•	•	•	•	•	22%
BKT	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1%
BAWG	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	7%	7%	4%
BPM	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0%	1%
AIB	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	16%	5%	3%
BOI	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	43%	2%	1%
BPER	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0%	•	1%
SABE	•	•	•	•	•	•	•	•	0%	•	•	•	•	•	•	•	31%	2%	4%
BMPS	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0%	•	2%
EURB	•	•	•	•	•	•	•	•	•	•	•	•	3%	•	•	•	0%	•	2%
BCP	•	•	•	•	•	•	•	•	•	1%	•	•	•	•	•	•	•	•	4%
NBG	•	•	•	•	•	•	4%	•	•	•	•	•	•	•	•	•	0%	•	9%
ALB	•	•	•	•	•	•	•	4%	•	•	•	•	•	•	•	•	3%	•	4%
BOP	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0%	•	9%

AT=Austria; BE=Belgium; BG=Bulgaria; HR=Croatia; CY=Cyprus; CZ=Czech Republic; FR=France; DE=Germany; GR=Greece; HU=Hungary; IE=Ireland; IT=Italy; LU=Luxembourg; NL=Netherlands; PL=Poland; PT=Portugal; RO=Romania; SK=Slovakia; ES=Spain; SE=Sweden; AU=Australia; BR=Brazil; CL=Chile; CO=Colombia; IN=India; JP=Japan; MK=Macedonia; MH=Marshall Islands; MX=Mexico; MZ=Mozambique; PE=Peru; RU=Russian Federation; CS=Serbia; SG=Singapore; CH=Switzerland; TR=Turkey; GB=United Kingdom; US=United States. CABK pro-forma for the acquisition of Bankia, based on transaction details announced by the company.

Source: European Banking Authority (EBA), Goldman Sachs Global Investment Research

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Exhibit 11: Geographic overlap: 36/406 combinations show a geo overlap > 75%, but 52/406 show an overlap >50%. Some combinations are cross border in name, but local in practice.

% of the target's EAD in geographies where acquirer has presence (weighted for the relative size of the acquirer's exposure compared to the target's). Deeper shades of green correspond to higher geographic overlap. Market cap in € bn

Acquirer (including market capitalisation)		Target																															
		BOP	ALB	NBG	BCP	EURB	BMPS	SABE	BPER	BOI	AIB	BPM	BAWG	BKT	RBI	CBK	CNAT	ABN	ERST	SOGN	CABK PF	UCG	BBVA	DBK	KBC	CAGR	ING	SAN	ISP	BNP	> 33%	> 50%	> 75%
BNP	€ 41.4	•	3%	•	32%	1%	100%	57%	100%	•	•	100%	37%	49%	11%	36%	88%	19%	3%	89%	10%	40%	31%	50%	65%	93%	54%	29%	36%	--	15	9	6
ISP	€ 30.7	•	3%	•	1%	1%	100%	10%	100%	•	•	100%	34%	5%	31%	10%	32%	9%	16%	12%	3%	50%	8%	12%	8%	22%	5%	3%	--	--	5	4	3
SAN	€ 28.2	•	3%	•	96%	1%	•	100%	1%	•	•	•	36%	100%	11%	38%	47%	10%	3%	24%	67%	15%	74%	36%	3%	21%	33%	--	--	--	10	5	3
ING	€ 25.2	•	3%	•	32%	1%	•	43%	1%	•	•	•	37%	46%	11%	64%	63%	84%	3%	28%	10%	32%	30%	59%	58%	28%	--	--	--	--	8	5	1
CAGR	€ 21.5	•	3%	•	2%	1%	100%	18%	100%	•	•	80%	33%	•	7%	24%	91%	16%	3%	90%	2%	29%	19%	33%	4%	--	--	--	--	--	5	5	5
KBC	€ 18.6	•	3%	•	2%	8%	•	2%	1%	•	•	•	15%	•	36%	3%	6%	4%	30%	7%	1%	5%	1%	2%	--	--	--	--	--	--	1	•	•
DBK	€ 16.8	•	3%	•	2%	1%	32%	32%	34%	•	•	26%	37%	37%	7%	89%	59%	17%	3%	29%	8%	39%	30%	--	--	--	--	--	--	--	6	2	1
BBVA	€ 16.2	•	3%	•	1%	1%	5%	71%	6%	•	•	5%	33%	89%	5%	12%	40%	8%	3%	16%	49%	12%	--	--	--	--	--	--	--	--	4	2	1
UCG	€ 15.8	•	3%	•	1%	1%	100%	11%	100%	•	•	100%	94%	7%	60%	49%	29%	9%	43%	19%	3%	--	--	--	--	--	--	--	--	--	7	5	4
CABK PF	€ 13.8	•	3%	•	41%	•	1%	68%	1%	•	•	1%	17%	100%	•	3%	11%	2%	1%	2%	--	--	--	--	--	--	--	--	--	--	3	2	1
SOGN	€ 10.8	•	3%	•	1%	1%	18%	17%	19%	•	•	15%	33%	•	39%	23%	87%	12%	20%	--	--	--	--	--	--	--	--	--	--	--	2	1	1
ERST	€ 7.7	•	11%	•	•	3%	•	1%	1%	•	•	•	76%	•	72%	2%	1%	2%	--	--	--	--	--	--	--	--	--	--	--	--	2	2	1
ABN	€ 6.9	•	3%	•	2%	1%	•	9%	1%	•	•	•	33%	•	6%	13%	36%	--	--	--	--	--	--	--	--	--	--	--	--	--	1	•	•
CNAT	€ 6.6	•	3%	•	2%	•	6%	10%	6%	•	•	5%	20%	6%	•	14%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•
CBK	€ 5.7	•	3%	•	32%	1%	2%	17%	3%	•	•	2%	37%	4%	11%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	•	•
RBI	€ 4.3	•	9%	•	6%	9%	•	•	•	•	•	•	75%	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	•
BKT	€ 3.1	•	•	•	11%	•	•	37%	•	•	•	•	4%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	•	•
BAWG	€ 3.0	•	3%	•	1%	1%	•	4%	1%	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•
BPM	€ 2.5	•	•	•	•	•	100%	•	99%	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	2	2
AIB	€ 2.5	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•
BOI	€ 2.0	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•
BPER	€ 1.8	•	1%	•	1%	1%	98%	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	1
SABE	€ 1.6	•	3%	•	1%	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•
BMPS	€ 1.3	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•
EURB	€ 1.2	100%	85%	95%	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3	3	3
BCP	€ 1.2	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•
NBG	€ 1.0	93%	81%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	2	2
ALB	€ 0.8	93%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	1
BOP	€ 0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•
> 33%		3	2	1	2	•	6	6	6	•	•	4	9	6	4	5	8	1	1	2	2	3	1	3	2	1	2	•	1	•	81		
> 50%		3	2	1	1	•	6	4	5	•	•	4	3	3	2	2	5	1	•	2	1	1	1	1	2	1	1	•	•	•		52	
> 75%		3	2	1	1	•	6	1	5	•	•	4	2	3	•	1	3	1	•	2	•	•	•	•	•	1	•	•	•	•			36

CABK pro-forma for the acquisition of Bankia, based on transaction details announced by the company.

Source: European Banking Authority (EBA), Company data, Goldman Sachs Global Investment Research

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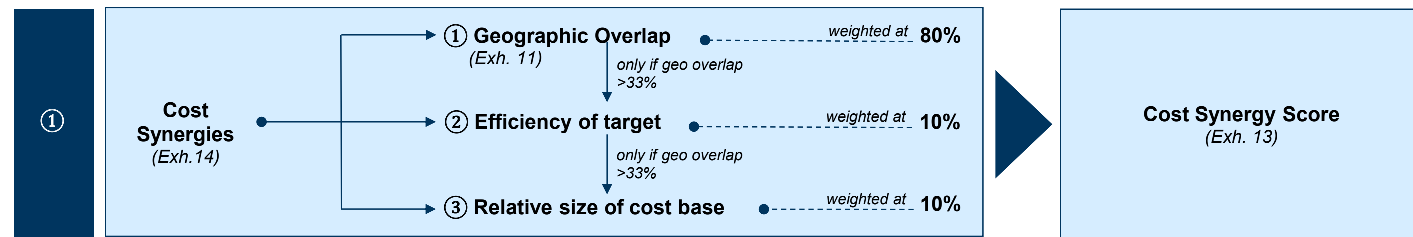
① Cost synergies: A range of 0-40%, driven primarily by geographic overlap

We establish the scope for cost synergies for each potential combination based on the steps outlined below. The result is a 0-40% cost synergy assumption, driven primarily by the extent of geographic overlap. Our analysis identifies 22 (or 5%) of all potential combinations with cost synergies at the maximum level (40% of target) and 32 (8%) potential combinations with cost synergies >30%. Inversely, 325 (80%) potential combinations have cost synergies at the minimum (0%) level.

Exhibit 12: Overview of our methodology - Cost Synergies



Source: Goldman Sachs Global Investment Research

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Exhibit 13: Cost synergies scores: our analysis identifies 22 potential combinations with costs synergies at 40%

Cost synergies; Combined weighted cost synergy score (on a scale of 0 to 10), with different shades of green corresponding to different quartiles. Market cap in € bn

Acquirer (including market capitalisation)		Target																																
		BOP	ALB	NBG	BCP	EURB	BMPS	SABE	BPER	BOI	AIB	BPM	BAWG	BKT	RBI	CBK	CNAT	ABN	ERST	SOGN	CABK PF	UCG	BBVA	DBK	KBC	CAGR	ING	SAN	ISP	BNP	# in Q1	# in Q2	# in Q3	# in Q4
BNP	€ 41.4	•	•	•	•	•	10	6	10	•	•	9	4	5	•	5	9	•	•	8	•	5	•	5	7	9	6	•	4	--	3	3	5	4
ISP	€ 30.7	•	•	•	•	•	9	•	9	•	•	9	4	•	•	•	•	•	•	•	•	5	•	•	•	•	•	•	--	--	3	•	1	1
SAN	€ 28.2	•	•	•	9	•	•	9	•	•	•	•	4	9	•	5	5	•	•	•	7	•	7	4	•	•	4	--	--	--	3	1	2	4
ING	€ 25.2	•	•	•	•	•	•	5	•	•	•	•	4	5	•	7	7	8	•	•	•	•	•	6	6	•	--	--	--	--	•	1	6	1
CAGR	€ 21.5	•	•	•	•	•	9	•	9	•	•	8	•	•	•	•	9	•	•	9	•	•	•	•	•	--	--	--	--	--	3	2	•	•
KBC	€ 18.6	•	•	•	•	•	•	•	•	•	•	•	•	•	4	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	•	•	•	1
DBK	€ 16.8	•	•	•	•	•	•	•	5	•	•	•	4	4	•	9	6	•	•	•	•	4	•	--	--	--	--	--	--	--	•	1	1	4
BBVA	€ 16.2	•	•	•	•	•	•	8	•	•	•	•	•	8	•	•	4	•	•	•	5	•	--	--	--	--	--	--	--	--	•	2	•	2
UCG	€ 15.8	•	•	•	•	•	9	•	9	•	•	9	9	•	7	5	•	•	5	•	•	--	--	--	--	--	--	--	--	--	4	•	2	1
CABK PF	€ 13.8	•	•	•	5	•	•	7	•	•	•	•	•	9	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	1	•	1	1
SOGN	€ 10.8	•	•	•	•	•	•	•	•	•	•	•	•	•	4	•	9	•	•	--	--	--	--	--	--	--	--	--	--	--	•	1	•	1
ERST	€ 7.7	•	•	•	•	•	•	•	•	•	•	•	7	•	7	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	•	2	•	•
ABN	€ 6.9	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	4	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	1
CNAT	€ 6.6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
CBK	€ 5.7	•	•	•	•	•	•	•	•	•	•	•	4	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	1
RBI	€ 4.3	•	•	•	•	•	•	•	•	•	•	•	7	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	1	•	•
BKT	€ 3.1	•	•	•	•	•	•	4	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	1
BAWG	€ 3.0	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BPM	€ 2.5	•	•	•	•	•	9	•	9	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	2	•	•
AIB	€ 2.5	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BOI	€ 2.0	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BPER	€ 1.8	•	•	•	•	•	9	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	1	•	•
SABE	€ 1.6	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BMPS	€ 1.3	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
EURB	€ 1.2	8	8	8	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	3	•	•
BCP	€ 1.2	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
NBG	€ 1.0	8	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	2	•	•
ALB	€ 0.8	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	1	•	•
BOP	€ 0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
# in Q1		•	•	•	1	•	4	1	4	•	•	3	1	2	•	•	1	•	•	•	•	•	•	•	•	•	•	•	•	•	17			
# in Q2		3	2	1	•	•	2	1	1	•	•	1	2	1	1	1	2	1	•	2	•	•	1	•	•	1	•	•	•	•		23		
# in Q3		•	•	•	•	•	•	3	•	•	•	•	•	2	1	2	3	•	•	•	1	1	•	2	2	•	1	•	•	•			18	
# in Q4		•	•	•	1	•	•	1	1	•	•	•	6	1	2	2	2	•	1	•	1	2	•	1	•	•	1	•	1	•				23

CABK pro-forma for the acquisition of Bankia, based on transaction details announced by the company.

Source: Goldman Sachs Global Investment Research

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Our cost synergy assumptions are calculated in 2 steps:

Step 1: Calibrating synergy range at 0-40%, in line with historical combinations. In particular, we screen potential combinations within the Euro area. Exhibit 15 provides an overview of relevant combinations that allows us to analyse the potential for cost synergies that can be applied in our analysis. We note the following:

- **Historical range: 6-54%.** Within the Euro area, announced cost synergies vary, with that of the Banca Regionale Europea & Banca Lombarda combination the lowest (6%) and that of Bancaja & Caja Madrid the highest (54%). The two most recent M&A combinations in the Eurozone, those of ISP/UBI and CaixaBank/Bankia, included cost synergy assumptions of 22% and 43% respectively.
- **Low dispersion.** When analysing the historical combinations by geography (e.g., Euro area vs. non-Euro area) we find the dispersion to be reasonably low. Consider that the medians (23%-23%) and averages (25%-24%) are close. When quartiling the level of cost synergies, the dispersion is higher (for €-deal, the first quartile is 20%, and the third is 30%).
- **Assigned range of 0-40% incorporated into our analysis.** Depending on the level of overlap (see Step 2), we assign a cost synergy range of 0-40% to the potential combinations. The top end of the range is lower than the maximum announced historically, but in line with the most recent in-market combination (CaixaBank/Bankia).

Step 2: Assigning synergies to individual potential combinations, based on three factors: (1) geographic overlap, **(2) efficiency of the target** and **(3) relative size of the target's/acquirer's cost base (Exhibit 14)**. We assess each of the three factors individually, and rank them in the context of all hypothetical combinations. We bring the three factors together in a **combined cost synergy potential score, which we overlay with the previously established range (0-40%).**

We note the following with regard to the key drivers of our analysis:

- **Geographic overlap (80% weighting): Our basic logic is that potential in-market combinations carry higher cost synergies than cross border combinations.** We use the level of geographic overlap as a gauge of scope for cost synergies. The higher the overlap, the higher the synergy potential. In our overall assessment of cost synergy potential this is, by far, the most important component, representing 80% of the overall cost synergy score.

  Our starting point is EBA disclosure of banks' EAD, per the main countries of their operation, which was published as part of EU-wide transparency exercise (April 2020). Based on country data, we establish the level of geographic overlap, which we subsequently rank on a scale of 0-10. [4] Additionally, we assign cost synergies equal to the bottom of our range (0%) if the geographic overlap between the two banks is lower than 1/3, independently of other criteria.

- **C/I of the target (10% weighting): We assume that, all else equal, inefficient targets have higher scope for cost synergies.** We use the level of C/I ratio as the gauge for this. We approximate target's C/I based on our 2020 forecasts. Again, we rank the banks on the basis of C/I and assign a score on a 0 to 10 scale (10 reflecting lowest cost efficiency within the sample, and thus higher cost-synergy potential).

- **Relative size of the target's cost base (10% weighting): We assume that the smaller the target relative to the acquirer, the more straight-forward the reduction in the target's cost base.** We assign a relative cost base size score on a 0 to 10 scale based on the distribution of all potential combinations in our sample, with high scores reflecting the relatively small cost base of a target and therefore higher cost synergy potential. For example, a relative size of 40% would yield a score of 5.

[4] For ISP and BPER: we allocate UBI's exposures to ISP and BPER to reflect the acquisition by ISP and the disposal of select branches to BPER. Exposures are allocated based on the % of UBI's loans that ISP and BPER are expected to integrate.

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② Cost Synergies Example: Hypothetical acquisition of CBK by DBK: A 9 out of 10 combined cost synergies potential score; translates into 35% cost synergies, or €2.3 bn

- **Geographic overlap:** 89%, for a score of 9.
  - **EAD Geographic distribution of target vs. acquirer:** We start with the EAD of the target/acquirer in major countries of operation, as per EBA disclosure. As per the latest transparency exercise, Commerzbank's EAD is €275 bn (for the top 10 countries), with major geographies being Germany (€197 bn, or 72% of top ten countries' EAD), Poland (€29 bn, or 11%) and the UK (€16 bn, or 6%). Deutsche Bank has an EAD of €472 bn (for the top 10 countries), with major geographies being Germany (€249 bn, or 53% of top ten countries' EAD), the US (€102 bn, or 22%) and Italy (€26 bn, or 5%).
  - **Ratio of overlap:** We look for overlap by comparing the target's EAD to that of acquirer. In the case of CBK, 89% of its EAD has an overlap with that of Deutsche Bank.
  - **Assigning a 0-10 score:** The 89% overlap places the combination of CBK/DBK into the second-highest range, and as such we assign it a score of 9 (out of a possible 10).
- **C/I of the target:** 81%, for a score of 8.
  - CBK, the target, is expected to report a C/I of 81% in 2020 on our estimates. This is above the sector average, and places Commerzbank into the 8th range. In turn, we assign it a score of 8.
- **Relative size of the target's cost base:** 31%, for a score of 5.
  - On our 2020 estimates, CBK's cost base is 31% that of DBK's. In a sector context, that places this hypothetical combination into the 5th decile, and thus we assign it a score of 5.
- **Combined score:** 9, for a cost synergy of 35%.
  - We proceed by attaching weights to the score of previous categories. We assign the highest weight (80%) to geographic overlap, and a weight of 10% to the score for the C/I and relative size of cost base.
  - In the example of CBK/DBK, a combined score of 9 is derived. In other words, the cost synergy potential is in the top 9th range of all theoretical combinations within our Eurozone coverage.
  - Given the starting range is 0-40%, the rank of 9 would translate into a cost synergy potential of 35%, or €2.3 bn.

Note that the M&A analysis contained herein is for illustrative purposes; we take no view on the likelihood of any specific transaction materialising.

Exhibit 14: Cost synergies: Potential combinations involving Italian and French banks would yield the highest synergies

Cost synergies; Level of cost synergies attributed to individual combinations (as % of target's cost base, range: 0- 40%), with different shades of green corresponding to different quartiles. Market cap in € bn

Acquirer (including market capitalisation)		Target																													# in Q1	# in Q2	# in Q3	# in Q4
		BOP	ALB	NBG	BCP	EURB	BMPS	SABE	BPER	BOI	AIB	BPM	BAWG	BKT	RBI	CBK	CNAT	ABN	ERST	SOGN	CABK PF	UCG	BBVA	DBK	KBC	CAGR	ING	SAN	ISP	BNP				
BNP	€ 41.4	•	•	•	•	•	40%	25%	40%	•	•	40%	15%	15%	•	15%	35%	•	•	35%	•	15%	•	20%	25%	40%	20%	•	12%	--	4	2	4	5
ISP	€ 30.7	•	•	•	•	•	40%	•	40%	•	•	40%	15%	•	•	•	•	•	•	•	•	20%	•	•	•	•	•	•	--	--	3	•	1	1
SAN	€ 28.2	•	•	•	40%	•	•	40%	•	•	•	•	15%	40%	•	15%	20%	•	•	•	25%	•	25%	15%	•	•	12%	--	--	--	3	•	3	4
ING	€ 25.2	•	•	•	•	•	•	15%	•	•	•	•	15%	15%	•	25%	25%	35%	•	•	•	•	•	20%	20%	•	--	--	--	--	•	1	4	3
CAGR	€ 21.5	•	•	•	•	•	40%	•	40%	•	•	30%	•	•	•	•	40%	•	•	40%	•	•	•	•	•	--	--	--	--	--	4	1	•	•
KBC	€ 18.6	•	•	•	•	•	•	•	•	•	•	•	•	•	12%	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	•	•	•	1
DBK	€ 16.8	•	•	•	•	•	•	•	15%	•	•	•	15%	15%	•	35%	25%	•	•	•	•	12%	•	--	--	--	--	--	--	--	•	1	1	4
BBVA	€ 16.2	•	•	•	•	•	•	30%	•	•	•	•	•	35%	•	•	15%	•	•	•	15%	•	--	--	--	--	--	--	--	--	•	2	•	2
UCG	€ 15.8	•	•	•	•	•	40%	•	40%	•	•	40%	40%	•	25%	15%	•	•	15%	•	•	--	--	--	--	--	--	--	--	--	4	•	1	2
CABK PF	€ 13.8	•	•	•	15%	•	•	25%	•	•	•	•	•	40%	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	1	•	1	1
SOGN	€ 10.8	•	•	•	•	•	•	•	•	•	•	•	•	•	12%	•	35%	•	•	--	--	--	--	--	--	--	--	--	--	--	•	1	•	1
ERST	€ 7.7	•	•	•	•	•	•	•	•	•	•	•	30%	•	30%	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	•	2	•	•
ABN	€ 6.9	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	12%	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	1
CNAT	€ 6.6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
CBK	€ 5.7	•	•	•	•	•	•	•	•	•	•	•	12%	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	1
RBI	€ 4.3	•	•	•	•	•	•	•	•	•	•	•	30%	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	1	•	•
BKT	€ 3.1	•	•	•	•	•	•	12%	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	1
BAWG	€ 3.0	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BPM	€ 2.5	•	•	•	•	•	40%	•	40%	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	•	•	•
AIB	€ 2.5	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BOI	€ 2.0	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BPER	€ 1.8	•	•	•	•	•	40%	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	•	•	•
SABE	€ 1.6	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BMPS	€ 1.3	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
EURB	€ 1.2	35%	30%	35%	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	3	•	•
BCP	€ 1.2	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
NBG	€ 1.0	35%	30%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	2	•	•
ALB	€ 0.8	35%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	1	•	•
BOP	€ 0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
# in Q1		•	•	•	1	•	6	1	5	•	•	3	1	2	•	•	1	•	•	1	•	•	•	•	•	1	•	•	•	•	22			
# in Q2		3	2	1	•	•	•	1	•	•	•	1	2	1	1	1	2	1	•	1	•	•	•	•	•	•	•	•	•	•		17		
# in Q3		•	•	•	•	•	•	2	•	•	•	•	•	•	1	1	3	•	•	•	1	1	1	2	2	•	1	•	•	•			15	
# in Q4		•	•	•	1	•	•	2	1	•	•	•	6	3	2	3	2	•	1	•	1	2	•	1	•	•	1	•	1	•				27

CABK pro-forma for the acquisition of Bankia, based on transaction details announced by the company.

Source: Goldman Sachs Global Investment Research

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Exhibit 15: Precedent Euro area bank deals saw cost synergies in the 6-54% range

€ mn unless otherwise stated, refers to synergies and restructuring charges targeted at announcement

Date	Deal (Target / Acquiror)	Cost Synergies		Restr. Costs
		(€mn)	% target's costs	x of cost synergies
Eurozone				
Apr-98	Credito Italiano / Unicredito	325	25%	0.6x
May-99	Banca Commerciale Italiana / Banca Intesa	506	20%	0.8x
Sep-99	Paribas / BNP	700	21%	-
Dec-99	Banca Regionale Europea / Banca Lombarda	14	6%	-
Dec-02	Credit Lyonnais / Credit Agricole	760	16%	-
Dec-03	Banco Atlantico / Banco de Sabadell	74	36%	1.6x
May-05	Bayerische Hypo / Unicredito Italiano	887	29%	1.5x
Nov-05	Eurohypo / Commerzbank	90	19%	-
Feb-06	BNP Paribas / BNL	250	13%	1.8x
May-06	Banco Urquijo / Banco de Sabadell	32	31%	2.7x
Aug-06	SanPaolo IMI / Banca Intesa	980	21%	1.5x
Oct-06	FriulAdria + Intesa (193 Brch) / Credit Agricole	65	9%	1.6x
Oct-06	BPI / Banco Popolare di Verona	220	20%	-
Nov-06	Banca Lombardae / Banche Popolari Unite SCRL	225	28%	1.7x
May-07	Capitalia / Unicredito Italiano	800	25%	-
Jun-07	Banca CR Firenze / Intesa Sanpaolo	120	20%	1.5x
Jul-08	Alliance & Leicester / Banco Santander	226	23%	-
Aug-08	Dresdner Bank / Commerzbank	1,900	39%	1.1x
Sep-08	Deutsche Postbank / Deutsche Bank	710	25%	2.0x
Jun-10	Bancaja / Caja Madrid	500	54%	-
Sep-10	Bank Zachodni WBK / Banco Santander	54	13%	-
Aug-14	Barclays Sau / CaixaBank	150	23%	2.9x
Mar-15	TSB Banking Group / Banco de Sabadell	225	23%	2.8x
Mar-16	Banca Popolare di Milano Scarl / Banco Popolare	320	34%	1.5x
Apr-16	Banco BPI / CaixaBank	85	13%	2.9x
Jan-17	"Target Bridge Institutions"/UBI Banca	194	34%	0.7x
Mar-17	Banco Mare Nostrum / Bankia	155	40%	2.2x
Jun-17	Banco Popular Espano / Banco Santander	500	33%	2.6x
Feb-19	Unipol Banca / BPER Banca	63	24%	0.8x
Feb-20	UBI Banca / Intesa San Paolo	510	22%	2.5x
Sep-20	CaixaBank / Bankia	770	43%	2.9x
Average		-	25%	1.8x
Median		-	23%	1.7x
Max		-	54%	2.9x
Min		-	6%	0.6x

Date	Deal (Target / Acquiror)	Cost Synergies		Restr. Costs
		(€mn)	% target's costs	x of cost synergies
Non-Eurozone				
Sep-99	Merita / Nordbanken Holding	76	7%	1.3x
Nov-99	NatWestBank / Royal Bank of Scotland	1,877	23%	-
Aug-00	Woolwich / Barclays	249	36%	1.0x
May-01	Bank of Scotland / Halifax Group	546	29%	1.1x
Sep-04	ABSA Group / Barclays	71	5%	3.2x
Dec-04	Northern Bank / Danske Bank	47	19%	4.3x
Mar-07	National Bank of Dubai / Emirates Bank	31	22%	-
Sep-08	HBOS / Lloyds TSB Group	1,265	9%	-
Feb-12	Kredyt Bank / Bank Zachodni WBK	82	34%	1.7x
Jun-13	Nordea Bank Polska / PKO Bank Polski	29	22%	-
Jun-16	National Bank of Abu Dhabi / First Gulf Bank	121	12%	1.2x
Dec-17	DB (Retail Banking Unit) – Poland / Bank Zachodni WBK	31	38%	2.0x
Apr-18	Raiffeisen Bank Pol (Core Oper) / Bank BGZ (BNP)	121	12%	1.0x
May-18	Virgin Money / CYBG	137	34%	2.0x
Jul-18	Gjensidige Bank / Nordea	25	56%	-
Dec-19	MONETA Money Bank / W□stenrot (Czech Subsidiaries)	12	31%	1.3x
Average		-	24%	1.8x
Median		-	23%	1.3x
Max		-	56%	4.3x
Min		-	5%	1.0x

Source: Thomson SDC, Company data

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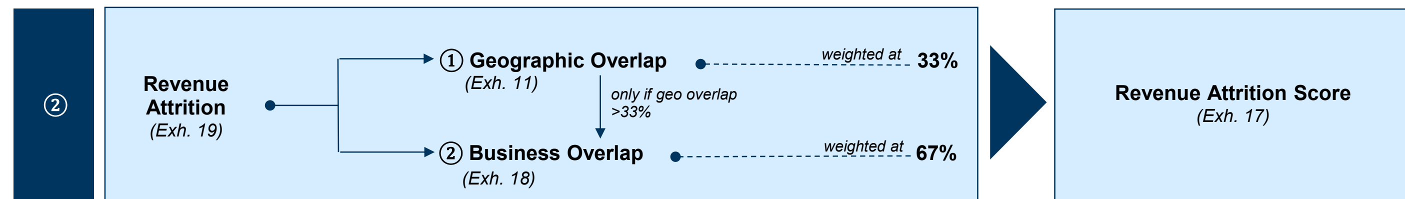
② Revenue attrition: From 0% to -3%, as a function of geographic and business mix overlap

Revenue attrition is a fragment feature of historical bank M&A. In general, banks with geographic overlap will experience client/business loss when combining. In any given geography, the extent of revenue loss tends to be higher when corporate/wholesale lenders combine, due to corporate client overlap. For the purposes of our analysis, we assume that revenue loss ranges from 0% to 3% of the target entity.

Our approach assumes that the no revenue loss (0%) materialises when two banks either have no geographic overlap, or where business mix is complementary. Similarly, we assume that maximum revenue loss (-3%) accompanies a potential combination of two banks with geographic overlap, with corporate business mix skew.

Overall, we gauge the level of geographic and business mix to attribute the level of revenue loss.

Exhibit 16: Overview of our analysis - Revenue attrition



Source: Goldman Sachs Global Investment Research

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Exhibit 17: Revenue attrition score: Combinations among large/international banks are principally impacted with a higher level of attrition

Revenue attrition score (scale 0-10, high score=high attrition), with different shades of red corresponding to different quartiles. Market cap in € bn

Acquirer (including market capitalisation)		Target																																
		BOP	ALB	NBG	BCP	EURB	BMPS	SABE	BPER	BOI	AIB	BPM	BAWG	BKT	RBI	CBK	CNAT	ABN	ERST	SOGN	CABK PF	UCG	BBVA	DBK	KBC	CAGR	ING	SAN	ISP	BNP	# in Q1	# in Q2	# in Q3	# in Q4
BNP	€ 41.4	•	•	•	•	•	7	2	7	•	•	9	2	3	•	4	3	•	•	8	•	7	•	6	5	8	5	•	5	--	5	4	2	4
ISP	€ 30.7	•	•	•	•	•	7	•	7	•	•	9	2	•	•	•	•	•	•	•	•	7	•	•	•	•	•	•	--	--	3	1	•	1
SAN	€ 28.2	•	•	•	6	•	•	6	•	•	•	•	3	5	•	2	4	•	•	•	5	•	4	3	•	•	2	--	--	--	•	2	4	4
ING	€ 25.2	•	•	•	•	•	•	3	•	•	•	•	2	2	•	4	3	4	•	•	•	•	•	5	3	•	--	--	--	--	•	•	4	4
CAGR	€ 21.5	•	•	•	•	•	7	•	8	•	•	9	•	•	•	•	4	•	•	9	•	•	•	•	•	--	--	--	--	--	4	•	1	•
KBC	€ 18.6	•	•	•	•	•	•	•	•	•	•	•	•	•	4	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	•	•	1	•
DBK	€ 16.8	•	•	•	•	•	•	•	5	•	•	•	2	3	•	6	2	•	•	•	•	7	•	--	--	--	--	--	--	--	•	3	•	3
BBVA	€ 16.2	•	•	•	•	•	•	3	•	•	•	•	•	4	•	•	2	•	•	•	2	•	--	--	--	--	--	--	--	--	•	•	2	2
UCG	€ 15.8	•	•	•	•	•	8	•	9	•	•	10	5	•	8	6	•	•	6	•	•	--	--	--	--	--	--	--	--	--	4	3	•	•
CABK PF	€ 13.8	•	•	•	4	•	•	5	•	•	•	•	•	4	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	•	•	3	•
SOGN	€ 10.8	•	•	•	•	•	•	•	•	•	•	•	•	•	6	•	4	•	•	--	--	--	--	--	--	--	--	--	--	--	•	1	1	•
ERST	€ 7.7	•	•	•	•	•	•	•	•	•	•	•	3	•	5	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	•	1	•	1
ABN	€ 6.9	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	3	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	1	•
CNAT	€ 6.6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
CBK	€ 5.7	•	•	•	•	•	•	•	•	•	•	•	2	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	1
RBI	€ 4.3	•	•	•	•	•	•	•	•	•	•	•	3	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	1	•
BKT	€ 3.1	•	•	•	•	•	•	3	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	1
BAWG	€ 3.0	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BPM	€ 2.5	•	•	•	•	•	8	•	9	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	•	•	•
AIB	€ 2.5	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BOI	€ 2.0	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BPER	€ 1.8	•	•	•	•	•	7	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	1	•	•
SABE	€ 1.6	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BMPS	€ 1.3	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
EURB	€ 1.2	5	4	7	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	2	1	•
BCP	€ 1.2	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
NBG	€ 1.0	6	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	2	•	•
ALB	€ 0.8	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	1	•
BOP	€ 0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
# in Q1		•	•	•	•	•	3	•	5	•	•	4	•	•	1	•	•	•	•	2	•	2	•	•	•	1	•	•	•	•	18			
# in Q2		2	1	1	1	•	3	1	1	•	•	•	1	•	2	2	•	•	1	•	•	1	•	1	1	•	•	•	1	•		20		
# in Q3		1	1	•	1	•	•	2	•	•	•	•	1	3	1	2	4	1	•	•	1	•	1	1	1	•	1	•	•	•			22	
# in Q4		•	•	•	•	•	•	3	•	•	•	•	7	3	•	1	4	•	•	•	1	•	•	1	•	•	1	•	•	•				21

CABK pro-forma for the acquisition of Bankia, based on transaction details announced by the company.

Source: European Banking Authority (EBA), Company data, Goldman Sachs Global Investment Research

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Step 1: Our starting point is that the best outcome for revenues of a newly combined entity is for no revenue loss to occur. We do not model for revenue synergies. Rather, we assume that revenue attrition will range between 0% and 3% (median 1.5%) of the target's revenues. This is an arbitrarily determined range. This said, multiple historical examples exist of meaningful revenue loss following a combination of entities with geographic and business mix overlap. We acknowledge that banks might communicate revenue synergies at the point of a potential combination announcement, but we equally expect the market to treat them with substantial skepticism.

Step 2: Assigning revenue loss of 0-3% to hypothetical combinations. For any given potential combination, **we assign a level of revenue attrition based on two factors: (1) banks' business mix** and **(2) geographic overlap (Exhibit 11)**. The logic is that direct competitors, in any given market, will have a level of client overlap, resulting in revenue loss (at least initially). We also assume that banks operating in the same business lines will tend to experience a level of client loss. In other words, the scope for cost synergies is inversely correlated to the risk of revenue loss.

We proceed along the following steps:

- **Geographic overlap (33% weighting).** We approximate geographic overlap between the two banks based on the percent of the target's exposure in geographies where the acquirer has an established presence (weighted for % of acquirer's EAD in corresponding geographies). Our calculations are based on the bank-by-bank disclosure made within the EU-wide transparency exercise published periodically by the EBA. We assign a geographic overlap score on a 0 to 10 scale based on the distribution of actual results within our sample, with high scores reflecting high overlap and therefore higher revenue attrition potential. Additionally, we assume no revenue attrition if geographic overlap between the two banks is lower than 1/3. For example, an overlap of 55% would yield a score of 6.
- **Business model overlap (67% weighting).** We approximate the business model mix of each bank based on corporate vs. retail split of its credit exposure, based on EBA's disclosure. Our basic logic is that a largely corporate bank, combining with a largely retail lender, will experience the least revenue loss. Inversely, two corporate lenders combining are likely to experience a higher level of revenue attrition.

  Similarly to the cost synergy analysis, we assign a business overlap score on a 0 to 10 scale based on the matrix outlined in Exhibit 18. The differentiation reflects our view that revenue attrition is likely to be higher for CIB operations rather than retail clients.[5]

[5] For ISP and BPER: we allocate UBI's exposures to ISP and BPER to reflect the acquisition by ISP and the disposal of select branches to BPER. Exposures are allocated based on the % of UBI's loans that ISP and BPER are expected to integrate.

Exhibit 18: We expect revenue attrition to be the highest for two corporate exposed banks and lowest for banks with a differentiated business mix

Revenue attrition (high score = high attrition); Business mix overlap score based on target and acquirer corporate business mix (% of total retail and corporate EAD, range in %).

Acquirer		Target										
Corporate Mix (% of EAD)		28% 32%	32% 36%	36% 40%	40% 44%	44% 48%	48% 52%	52% 56%	56% 60%	60% 65%	65% 69%	69% 73%
28%	32%	5	4	4	3	2	1	2	2	2	2	3
32%	36%	5	4	3	3	2	1	1	2	2	2	3
36%	40%	4	4	3	2	2	1	1	1	2	3	4
40%	44%	4	3	3	2	1	1	1	1	2	3	4
44%	48%	3	3	2	2	1	0	1	2	3	4	5
48%	52%	3	2	2	1	1	0	1	2	3	4	5
52%	56%	2	2	1	1	0	1	2	3	4	5	6
56%	60%	2	1	1	0	1	2	3	4	5	6	7
60%	65%	1	1	0	1	2	3	4	5	6	7	8
65%	69%	1	0	1	2	3	4	5	6	7	8	9
69%	73%	0	1	2	3	4	5	6	7	8	9	10

We incorporate **moderate revenue attrition** to banks with relatively large retail units.

We assign **low revenue attrition** to banks with differentiated business mix

We assume **high revenue attrition** for corporate banks with relatively large CIB operations

Source: European Banking Authority (EBA), Company data, Goldman Sachs Global Investment Research

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③ Revenue Attrition Example: Hypothetical acquisition of CBK by DBK: A 6 out of 10 score on revenue attrition

- **Geographic overlap:** 89%, for a score of 9.
- **EAD Geographic distribution of target vs. acquirer:** We start with the EAD of the target/acquirer in major countries of operation, as per EBA disclosure. As per the latest transparency exercise, Commerzbank's EAD is €275 bn (for the top 10 countries), with major geographies being Germany (€197 bn, or 72% of top ten countries' EAD), Poland (€29 bn, or 11%) and the UK (€16 bn, or 6%). Deutsche Bank has an EAD of €472 bn (for the top 10 countries), with major geographies being Germany (€249 bn, or 53% of top ten countries' EAD), the US (€102 bn, or 22%) and Italy (€26 bn, or 5%).
- **Ratio of overlap:** We look for overlap by comparing the target's EAD to that of acquirer. In the case of CBK, 89% of its EAD has an overlap with that of Deutsche Bank.
- **Assigning a 0-10 score:** The 89% overlap places the combination of CBK/DBK into the second-highest range, and as such we assign it a score of 9 (out of a possible 10).
- **Business mix:** A score of 4 out of 10.
    - We start with the EAD of the target/acquirer classified as either corporate or retail, as per EBA disclosure. We do not take "other" exposures into account, and thus calculate a corporate/retail split only. On that basis, the split of CBK EAD between retail and corporate is 44%/56%, whilst that of Deutsche Bank is 37%/63%.
    - This level of overlap is assigned as per Exhibit 18. In the case of CBK/DBK, the business mix corresponds to a score of 4 out of 10.
- **Combined score:** 6, for a revenue loss of 1.8%
    - We proceed by attaching weightings to the score of previous categories. We assign the extent of business mix overlap a weighting of 2/3, and geographic overlap a weighting of 1/3.
    - In the example of CBK/DBK, a combined score of 6 is derived. In other words, the revenue attrition risk is in the 6th range of all theoretical combinations within our Eurozone coverage.
    - Given the starting range of revenue loss is 0% to -3%, the rank of 6 would translate into a revenue loss of 1.8%.

Note that the M&A analysis contained herein is for illustrative purposes; we take no view on the likelihood of any specific transaction materialising.

Exhibit 19: Revenue attrition: 23/406 (3%) of all potential combination would entail revenue loss >2% of the target's income

Revenue attrition (as % of target's income, range: -3% to 0%), with different shades of red corresponding to different quartiles. Market cap in € bn

Acquirer (including market capitalisation)		Target																																
		BOP	ALB	NBG	BCP	EURB	BMPS	SABE	BPER	BOI	AIB	BPM	BAWG	BKT	RBI	CBK	CNAT	ABN	ERST	SOGN	CABK PF	UCG	BBVA	DBK	KBC	CAGR	ING	SAN	ISP	BNP	# in Q1	# in Q2	# in Q3	# in Q4
BNP	€ 41.4	•	•	•	•	•	-2%	-1%	-2%	•	•	-3%	-1%	-1%	•	-1%	-1%	•	•	-2%	•	-2%	•	-2%	-2%	-2%	-2%	•	-2%	--	4	3	4	4
ISP	€ 30.7	•	•	•	•	•	-2%	•	-2%	•	•	-3%	-1%	•	•	•	•	•	•	•	•	-2%	•	•	•	•	•	•	--	--	3	1	•	1
SAN	€ 28.2	•	•	•	-2%	•	•	-2%	•	•	•	•	-1%	-2%	•	-1%	-1%	•	•	•	-2%	•	-1%	-1%	•	•	-1%	--	--	--	•	2	4	4
ING	€ 25.2	•	•	•	•	•	•	-1%	•	•	•	•	0%	0%	•	-1%	-1%	-1%	•	•	•	•	•	-2%	-1%	•	--	--	--	--	•	•	3	5
CAGR	€ 21.5	•	•	•	•	•	-2%	•	-2%	•	•	-3%	•	•	•	•	-1%	•	•	-3%	•	•	•	•	•	--	--	--	--	--	4	•	1	•
KBC	€ 18.6	•	•	•	•	•	•	•	•	•	•	•	•	•	-1%	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	•	•	1	•
DBK	€ 16.8	•	•	•	•	•	•	•	-2%	•	•	•	-1%	-1%	•	-2%	-1%	•	•	•	•	-2%	•	--	--	--	--	--	--	--	•	2	1	3
BBVA	€ 16.2	•	•	•	•	•	•	-1%	•	•	•	•	•	-1%	•	•	0%	•	•	•	-1%	•	--	--	--	--	--	--	--	--	•	•	1	3
UCG	€ 15.8	•	•	•	•	•	-2%	•	-3%	•	•	-3%	-2%	•	-2%	-2%	•	•	-2%	•	•	--	--	--	--	--	--	--	--	--	4	2	1	•
CABK PF	€ 13.8	•	•	•	-1%	•	•	-2%	•	•	•	•	•	-1%	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	•	•	3	•
SOGN	€ 10.8	•	•	•	•	•	•	•	•	•	•	•	•	•	-2%	•	-1%	•	•	--	--	--	--	--	--	--	--	--	--	--	•	1	1	•
ERST	€ 7.7	•	•	•	•	•	•	•	•	•	•	•	-1%	•	-2%	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	•	•	1	1
ABN	€ 6.9	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	-1%	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	1
CNAT	€ 6.6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
CBK	€ 5.7	•	•	•	•	•	•	•	•	•	•	•	0%	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	1
RBI	€ 4.3	•	•	•	•	•	•	•	•	•	•	•	-1%	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	1
BKT	€ 3.1	•	•	•	•	•	•	-1%	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	1
BAWG	€ 3.0	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BPM	€ 2.5	•	•	•	•	•	-2%	•	-3%	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	•	•	•
AIB	€ 2.5	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BOI	€ 2.0	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BPER	€ 1.8	•	•	•	•	•	-2%	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	1	•	•
SABE	€ 1.6	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
BMPS	€ 1.3	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
EURB	€ 1.2	-2%	-1%	-2%	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	1	2	•
BCP	€ 1.2	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
NBG	€ 1.0	-2%	-2%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	1	1	•
ALB	€ 0.8	-1%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	1	•
BOP	€ 0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	•	•	•	•
# in Q1		•	•	•	•	•	3	•	5	•	•	4	•	•	1	•	•	•	•	2	•	1	•	•	•	1	•	•	•	•	17			
# in Q2		1	•	1	1	•	3	1	•	•	•	•	•	•	1	2	•	•	1	•	•	2	•	1	•	•	•	•	•	•		14		
# in Q3		2	2	•	1	•	•	1	1	•	•	•	1	3	2	2	3	1	•	•	1	•	1	1	1	•	1	•	1	•			25	
# in Q4		•	•	•	•	•	•	4	•	•	•	•	8	3	•	1	5	•	•	•	1	•	•	1	1	•	1	•	•	•				25

CABK pro-forma for the acquisition of Bankia, based on transaction details announced by the company.

Source: European Banking Authority (EBA), Company data, Goldman Sachs Global Investment Research

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③ Eligible Badwill = Badwill - Purchase Price Allocation (PPA)

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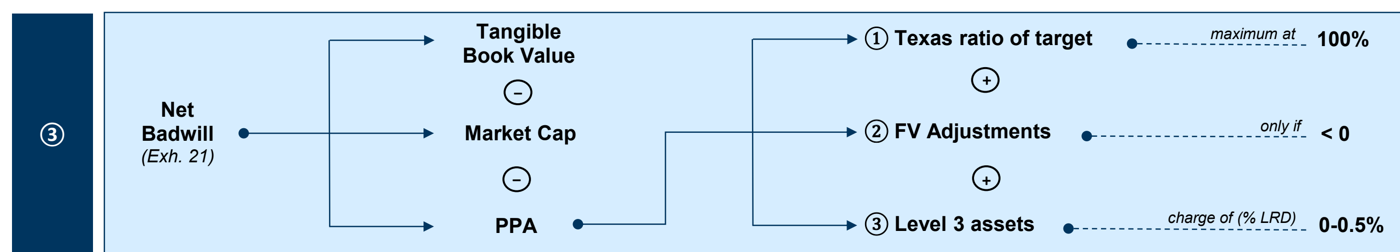
Importantly, we assume that any badwill generated in the potential combination would serve as a source of funding, reducing the amount of shares to be issued were it not recognised. Upon completion, a negative difference between price paid and adjusted value of the target's assets net of liabilities could be recognised as a gain in the P&L. This gain could therefore, accounting-wise, accrue to the retained profits component of equity, and therefore count towards tangible equity as well as CET1 capital. Should the future accounting, regulatory or supervisory approach to treating badwill as a source of capital change, so would the output financials of a potential combination.

Exhibit 20: Overview of our analysis - Badwill



Source: Goldman Sachs Global Investment Research

Substantially all Eurozone banks trade at a (deep) discount to 1x P/TB. Any potential combination where the price consideration for the target implies a deep discount to 1x P/TBV has scope to "create" significant capital, we estimate, which in turn would reduce the required share issuance/dilution. This would make a crucial difference to the financial aspects of any potential combination. The final amount of capital created in this manner would be a function of: (1) valuation multiples; and (2) PPA (i.e., defining the scope for end-adjustment of badwill). For the purposes of our analysis we proceed as follows:

- **Step 1: Estimated maximum badwill.** Our starting point is the tangible equity of the target, from which we subtract the purchase price. In turn, this gives us the full (or maximum amount in our methodology) of badwill. We also assume that (1) the tax implications of recognising badwill are neutral (no tax liability is created) and (2) no adjustment to badwill recognition - beyond PPA (see below) - is imposed.
- **Step 2: Estimating PPA.** IFRS 3 requires an acquirer to compute goodwill (or in this case badwill) by comparing the combination value ("price") to the fair value of net assets acquired ("FV of acquired assets"). The latter can differ from stated tangible equity for a number of reasons and directly affects the amount of recognised goodwill/badwill. The amount by which the fair value of acquired assets differs from their stated value is referred to as a purchase price

allocation (or "PPA") adjustment. PPA calculation is a complex and time-consuming process, which the banks are allowed to retroactively modify for up to 12 months following the completion of a potential combination (indicating the complexity and uncertainty in the process). Any estimate of the PPA, on the basis of public information, is therefore approximate. This is an important caveat to our analysis. We note that fair value differences would (under certain conditions) be amortised over the remaining life of the assets to which they relate. An initial net negative PPA could lead to an earnings uplift, as assets approach maturity. We do not take this into account in this exercise.

- In our analysis, we calibrate the PPA charge for each potential combination to reflect write-downs of non-performing exposures and mark-to-market of the target's balance sheet. Our estimate is driven by the three key drivers outlined below, each applicable to target's financials:

  - **Texas ratio.** An acquisition of a bank that holds a relatively high stock of non-performing exposures (NPEs) is likely to involve additional clean-up charges. For the purpose of our analysis we have assumed that size of **an incremental impairment should be sufficient to lower the target's Texas ratio to at least a 100%**. For banks where the Texas ratio is at or below that threshold, we assume no extra costs. Our calculations are based on the bank-by-bank disclosure made within the EU-wide transparency exercise published periodically by the EBA. For Greek banks we use reported data as of 2Q20, to reflect most recent improvements in terms of NPE reduction.

  - **Fair value items, but only if they result in negative adjustments; we do not assign credit for positive adjustments.** Another source of PPA would stem from the application of market values to assets and liabilities that are accounted for at amortised cost (i.e., unrecognised FV differences between financial assets and liabilities). Existing IFRS accounting standards exempt select balance sheet items from fair-value calculations. These items include, but are not limited, to held-to-maturity bond portfolios. For the purpose of our analysis **we use banks' own disclosure to approximate a mark-to-market of the target's assets and liabilities**. In our analysis, we have chosen a conservative approach and only take into account negative MtM. In our view, this is likely to be an accurate approach, as evidenced, for example, in recent combinations where unrealised gains did not contribute towards positive PPA.

  - **Level 3 assets.** Level 3 assets are generally considered to be the most illiquid/hardest to value. As such, we assume that they will face a high level of scrutiny by a potential acquirer. Our methodology takes the ratio of Level 3 assets/LRD, and assigns a PPA charge (pre-tax) in a predefined 0% - 0.5% of LRD range, depending on the level of exposure. This is an arbitrary figure, which will be subject to substantial deviation if combinations materialise. However, we do believe it is an area that investors will look at too, when determining potential sources of PPA charges. Our calculations are based on banks' disclosures and our estimates.

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- **Step 3: Estimating eligible badwill (Exhibit 21).** We reduce our estimated pre-PPA maximum badwill by the amount of the estimated post-tax PPA. We then assume that a 100% of the estimated eligible badwill is available to the acquirer.

⑤ Badwill and PPA Example: Hypothetical acquisition of CBK by DBK: €19 bn of eligible badwill

Estimating eligible badwill consists of maximum badwill potential (calculated as TBV less purchase price) and PPA. We explain the general methodology on our concrete example, as follows:

- **Badwill: €20 bn.** CBK has a TBV of €25.3 bn (for 2020, on our estimates). At current market prices, the consideration paid would amount to €5.7 bn, resulting in badwill potential of €19.6 bn. Were one to assume no PPA adjustment, this would be the relevant badwill figure.
- **PPA: -€1 bn**. Of the three components of PPA, only the charge on Level 3 assets applies:
  - **Texas ratio cannot exceed 100%:** As per EBA data, CBK's texas ratio stood at 13%, deeply below our threshold of 100%. Therefore, our approach suggests that no incremental PPA adjustment is required, for the credit quality aspect.
  - **MtM of assets accounted for at amortised cost: €0.1 bn, not affecting PPA, under our approach.** When the potential combination of DBK/CBK was formally considered, the FV of CBK assets and liabilities yielded a negative amount of €4.4 bn, when applying a 30% tax rate (see: *A potential Deutsche/Commerzbank merger: Assessing the strategic and financial rationales*). These primarily stemmed from CBK's bond portfolios. Since then the situation has changed - the last accounts suggest a positive result of c.€0.1 bn post tax. This represents a swing of >€4.5 bn, post tax within the last two years, for example. As we do not assign value to this amount, our approach suggests no incremental PPA adjustment from this source.
  - **Level 3 assets: A charge of 0% - 0.5%: -€1 bn.** CBK's Level 3 assets account for 1.0% of our 2020 LRD estimates. This results in a score of 5 out of 10, assigning a value adjustment of -0.3%, or €1.5 bn pre-tax/€1 bn post-tax.
- **Overall: Eligible badwill of c.€19 bn.** Finally, we combine the maximum potential badwill (in this case €19.6 bn) with the PPA estimate (-€1 bn) to derive the eligible badwill, which in this case would stand at €18.6 bn. This amount would benefit the financials of the potential combination, given it would reduce the need for equity issuance, and therefore improve the accretion/dilution prospects.

  Note that the M&A analysis contained herein is for illustrative purposes; we take no view on the likelihood of any specific transaction materialising. Pricing as of Oct. 20.

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Exhibit 21: Net badwill: Substantial badwill potential for most banks
Badwill (in shades of green +)/goodwill (in red -), € bn, assuming 100% usage allowance. Market cap in € bn.

Acquirer (including market capitalisation)		Target																												
		BOP	ALB	NBG	BCP	EURB	BMPS	SABE	BPER	BOI	AIB	BPM	BAWG	BKT	RBI	CBK	CNAT	ABN	ERST	SOGN	CABK PF	UCG	BBVA	DBK	KBC	CAGR	ING	SAN	ISP	BNP
BNP	€ 41.4	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	6.3	8.5	6.8	0.0	1.4	7.0	18.6	5.3	11.4	5.3	33.9	17.5	33.4	22.8	26.7	-0.8	17.1	27.8	37.2	17.5	--
ISP	€ 30.7	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	6.3	8.5	6.8	0.0	1.4	7.0	18.6	5.3	11.4	5.3	33.9	17.5	33.4	22.8	26.7	-0.8	17.1	27.8	37.2	--	--
SAN	€ 28.2	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	6.3	8.5	6.8	0.0	1.4	7.0	18.6	5.3	11.4	5.3	33.9	17.5	33.4	22.8	26.7	-0.8	17.1	27.8	--	--	--
ING	€ 25.2	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	6.3	8.5	6.8	0.0	1.4	7.0	18.6	5.3	11.4	5.3	33.9	17.5	33.4	22.8	26.7	-0.8	17.1	--	--	--	--
CAGR	€ 21.5	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	6.3	8.5	6.8	0.0	1.4	7.0	18.6	5.3	11.4	5.3	33.9	17.5	33.4	22.8	26.7	-0.8	--	--	--	--	--
KBC	€ 18.6	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	6.3	8.5	6.8	0.0	1.4	7.0	18.6	5.3	11.4	5.3	33.9	17.5	33.4	22.8	26.7	--	--	--	--	--	--
DBK	€ 16.8	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	6.3	8.5	6.8	0.0	1.4	7.0	18.6	5.3	11.4	5.3	33.9	17.5	33.4	22.8	--	--	--	--	--	--	--
BBVA	€ 16.2	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	6.3	8.5	6.8	0.0	1.4	7.0	18.6	5.3	11.4	5.3	33.9	17.5	33.4	--	--	--	--	--	--	--	--
UCG	€ 15.8	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	6.3	8.5	6.8	0.0	1.4	7.0	18.6	5.3	11.4	5.3	33.9	17.5	--	--	--	--	--	--	--	--	--
CABK PF	€ 13.8	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	6.3	8.5	6.8	0.0	1.4	7.0	18.6	5.3	11.4	5.3	33.9	--	--	--	--	--	--	--	--	--	--
SOGN	€ 10.8	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	6.3	8.5	6.8	0.0	1.4	7.0	18.6	5.3	11.4	5.3	--	--	--	--	--	--	--	--	--	--	--
ERST	€ 7.7	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	6.3	8.5	6.8	0.0	1.4	7.0	18.6	5.3	11.4	--	--	--	--	--	--	--	--	--	--	--	--
ABN	€ 6.9	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	6.3	8.5	6.8	0.0	1.4	7.0	18.6	5.3	--	--	--	--	--	--	--	--	--	--	--	--	--
CNAT	€ 6.6	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	6.3	8.5	6.8	0.0	1.4	7.0	18.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CBK	€ 5.7	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	6.3	8.5	6.8	0.0	1.4	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RBI	€ 4.3	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	6.3	8.5	6.8	0.0	1.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BKT	€ 3.1	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	6.3	8.5	6.8	0.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BAWG	€ 3.0	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	6.3	8.5	6.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BPM	€ 2.5	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	6.3	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AIB	€ 2.5	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	6.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BOI	€ 2.0	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	4.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BPER	€ 1.8	n.m.	2.7	3.4	3.9	3.2	4.2	8.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SABE	€ 1.6	n.m.	2.7	3.4	3.9	3.2	4.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BMPS	€ 1.3	n.m.	2.7	3.4	3.9	3.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EURB	€ 1.2	n.m.	2.7	3.4	3.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BCP	€ 1.2	n.m.	2.7	3.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NBG	€ 1.0	n.m.	2.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ALB	€ 0.8	n.m.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BOP	€ 0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

CABK pro-forma for the acquisition of Bankia, based on transaction details announced by the company. For BOP, assuming a maximum Texas ratio of 100% would imply no creation of badwill.

Source: Goldman Sachs Global Investment Research

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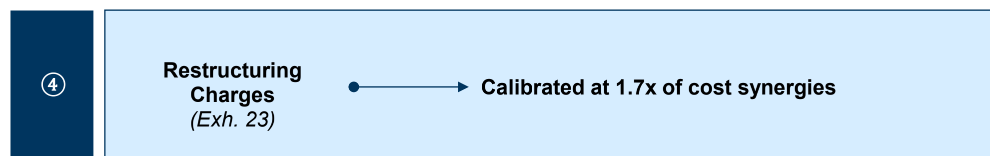
④ Restructuring charges: Calibrated at 1.7x cost synergies, in line with historical median

In this step, we assign the level of restructuring charges associated with each potential combination. This is a straightforward assumption, based on historical combinations, as follows:

Exhibit 22: Overview of our methodology - Restructuring charges



Source: Goldman Sachs Global Investment Research

- **We examine historical restructuring charges as a multiple of announced cost synergies.** In Exhibit 15 we show that, since 1998, the range of restructuring charges/announced cost synergies was between 0.6x and 2.9x in the €-zone bank combinations, and between 1.0x and 4.3x outside of the €-zone. The respective median and (simple) averages stand at 1.7x and 1.8x for the Eurozone bank combinations and 1.3x and 1.8x for the non €-zone combinations. The two most recent combinations - ISP/UBI and CABK/BKIA - announced 2.5x and 2.9x restructuring costs relative to announced cost synergies.

- **Calibration at 1.7x.** For the purposes of our analysis, **we calibrate the multiple at 1.7x which represents the median of our sample for the €-zone historical combinations**. We find applying the median to be methodologically straightforward; however, we do point out: (1) there can be a geographic bias in the level of restructuring costs, driven primarily by the differences in national labor laws; (2) the level of restructuring charges can be opportunistically motivated, as it heavily depends on the speed and type of cost reduction, especially those related to headcount; and (3) the two most recent combinations incurred restructuring/cost synergy ratios > 2.5x, which is higher when compared to our assumption.

- **Phasing: 100% upfront.** Furthermore, in our calculations, we have assumed that 100% of the restructuring charge was taken upfront.

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④ Restructuring charges Example: Hypothetical acquisition of CBK by DBK

- As for every combination in our analysis, **we assume that DBK would expense a restructuring charge equivalent to 1.7x costs synergies, equivalent to €4.0 bn.**

Note that the M&A analysis contained herein is for illustrative purposes; we take no view on the likelihood of any specific transaction materialising.

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Exhibit 23: Restructuring charges: Combinations involving French banks would require the highest absolute restructuring charges

Pre-tax restructuring charge (€ bn), calibrated at 1.7x cost synergies. Higher restructuring charges in deeper shade of red. Market cap in € bn

Acquirer (including market capitalisation)		Target																												
		BOP	ALB	NBG	BCP	EURB	BMPS	SABE	BPER	BOI	AIB	BPM	BAWG	BKT	RBI	CBK	CNAT	ABN	ERST	SOGN	CABK PF	UCG	BBVA	DBK	KBC	CAGR	ING	SAN	ISP	BNP
BNP	€ 41.4	•	•	•	•	•	-1.5	-1.3	-1.1	•	•	-1.7	-0.1	-0.2	•	-1.7	-3.4	•	•	-10.0	•	-2.5	•	-7.3	-1.8	-8.8	-3.7	•	-2.1	--
ISP	€ 30.7	•	•	•	•	•	-1.5	•	-1.1	•	•	-1.7	-0.1	•	•	•	•	•	•	•	•	-3.4	•	•	•	•	•	•	--	--
SAN	€ 28.2	•	•	•	-0.8	•	•	-2.1	•	•	•	•	-0.1	-0.6	•	-1.7	-2.0	•	•	•	-2.7	•	-4.6	-5.3	•	•	-2.2	--	--	--
ING	€ 25.2	•	•	•	•	•	•	-0.8	•	•	•	•	-0.1	-0.2	•	-2.8	-2.5	-3.1	•	•	•	•	•	-3.7	-1.4	•	--	--	--	--
CAGR	€ 21.5	•	•	•	•	•	-1.5	•	-1.1	•	•	-1.3	•	•	•	•	-3.9	•	•	-8.8	•	•	•	•	•	--	--	--	--	--
KBC	€ 18.6	•	•	•	•	•	•	•	•	•	•	•	•	•	-0.6	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--
DBK	€ 16.8	•	•	•	•	•	•	•	-0.4	•	•	•	-0.1	-0.2	•	-4.0	-2.5	•	•	•	•	-2.0	•	--	--	--	--	--	--	--
BBVA	€ 16.2	•	•	•	•	•	•	-1.6	•	•	•	•	•	-0.5	•	•	-1.5	•	•	•	-1.6	•	--	--	--	--	--	--	--	--
UCG	€ 15.8	•	•	•	•	•	-1.5	•	-1.1	•	•	-1.7	-0.4	•	-1.3	-1.7	•	•	-1.1	•	•	--	--	--	--	--	--	--	--	--
CABK PF	€ 13.8	•	•	•	-0.3	•	•	-1.3	•	•	•	•	•	-0.6	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--
SOGN	€ 10.8	•	•	•	•	•	•	•	•	•	•	•	•	•	-0.6	•	-3.4	•	•	--	--	--	--	--	--	--	--	--	--	--
ERST	€ 7.7	•	•	•	•	•	•	•	•	•	•	•	-0.3	•	-1.6	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--
ABN	€ 6.9	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	-1.1	--	--	--	--	--	--	--	--	--	--	--	--	--
CNAT	€ 6.6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CBK	€ 5.7	•	•	•	•	•	•	•	•	•	•	•	-0.1	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RBI	€ 4.3	•	•	•	•	•	•	•	•	•	•	•	-0.3	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BKT	€ 3.1	•	•	•	•	•	•	-0.2	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BAWG	€ 3.0	•	•	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BPM	€ 2.5	•	•	•	•	•	-1.5	•	-1.1	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AIB	€ 2.5	•	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BOI	€ 2.0	•	•	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BPER	€ 1.8	•	•	•	•	•	-1.1	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SABE	€ 1.6	•	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BMPS	€ 1.3	•	•	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EURB	€ 1.2	-0.5	-0.4	-0.5	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BCP	€ 1.2	•	•	•	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NBG	€ 1.0	-0.5	-0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ALB	€ 0.8	-0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BOP	€ 0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

CABK pro-forma for the acquisition of Bankia, based on transaction details announced by the company.

Source: Goldman Sachs Global Investment Research

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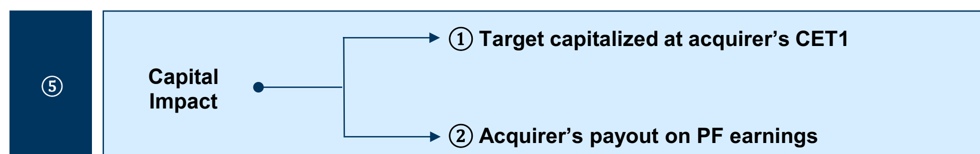
⑤ Capital: CET1 and DIV policy of the acquirer remain unchanged after a combination

We calculate the pro-forma capital impact of each potential combination, taking into account the following assumptions:

Exhibit 24: Overview of our methodology - Capital impact



Source: Goldman Sachs Global Investment Research

- **Capital level of target = current capital level of acquirer.** For the purposes of our analysis, we assume that every hypothetical combination will see the capitalisation of the target set at the same level as that of the acquirer. This approach implies an incremental capital need if the target has a lower CET1 vs. the acquirer, and vice-versa. We note that if a target had enough capital - and therefore badwill - to fund the new proforma capitalisation and all extra charges (restructuring, capital deductions), the residual badwill would result in a higher CET1 ratio for the combined entity than for the acquirer originally.
- **Amount of capital raised.** For each potential combination, we estimate the amount of external capital raise (if required). This is driven, primarily, by (1) restructuring charges and (2) the recapitalisation needs of the target, when the target's CET1 is below that of the acquirer.
- **This is a theoretical assumption,** which errs on the side of caution. In practice, the last two announced combinations (ISP/UBI and CABK/BKIA) have seen the combined entity's target pro-forma ratios allow for limited incremental re-leveraging. However, we also do not model for an increase of capital requirements, were the newly combined entity to trigger an increase in capital requirements due to, for example, G-SIB buffers (size, complexity), differences in Pillar-2 requirements, etc. Given that it is not possible to model capital mitigation actions (e.g., disposals/sales/spin-offs) in our hypothetical model, we believe this is methodologically the most appropriate approach.
- **Capital / distribution & Dividends.** We assume a payout on the target's forecast profits (GSe), and on incremental synergies (lower by phased restructuring charges) at the same level forecast (GSe) for the acquirer.

We estimate capital levels for a potential combination based on (1) the criteria mentioned above, and we (2) allow for a full recognition of badwill. We incorporate (3) a residual capital hike in the case of a shortfall.

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⑥ Capital of NewCo: Example: Hypothetical acquisition of CBK by DBK: CET1 for combined entity set at 13.3%, no dividend distribution; in line with current DBK stand-alone forecast

In the example of DBK/CBK, the capital hurdle would be set as follows:

- **Capitalising CBK at the level of DBK: CET1 13.3%.** We assume that DBK would capitalise CBK at 13.3%, equivalent to DBK's last reported CET1. This compares to CBK's CET1 of 13.4%.
- **Required capital raised: €4.2 bn**. In the case of DBK/CBK, the CET1 acquirer (13.3%) and target (13.4%) are very similar, giving rise for no recapitalisation of target, from this source (i.e., were CBK to have CET1 well below DBK, an incremental capital need would crystallize, in our model). However, the potential combination gives rise to substantial restructuring charges which, in our model, need to be funded upfront. Additionally, we estimate a PPA of €1 bn. Restructuring and PPA are the major drivers of the assumed external capital hike.
- **Dividend payout:** When estimating the capital position in the outer years, we assume that the dividend policy of the newly created entity is the same as that of the acquirer. In the case of DBK/CBK therefore, we model for no capital distribution to shareholders in the 2020-22E period, with a 30% payout ratio from 2023E profits (payable in 2024E). This is in line with our current standalone estimates for DBK.

Note that the M&A analysis contained herein is for illustrative purposes; we take no view on the likelihood of any specific transaction materialising.

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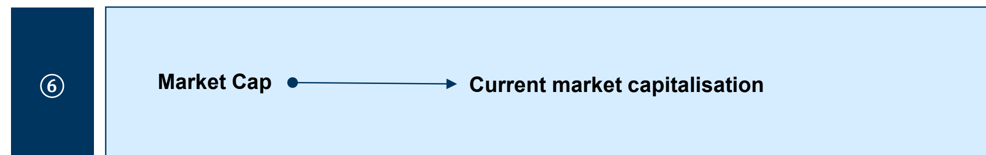
⑥ Market capitalisation & share of target acquired

We examine all combinations in which a potential **acquirer** (defined as a bank with a larger market cap) **purchases a 100% stake in a smaller bank**. Our sample includes a total of 29 Euro area banks resulting in 406 potential combinations. For all potential combinations, we assume that the **deal is based on** (1) **the closing share price of the acquirer** and (2) **the closing share price of the target**.

Exhibit 25: Overview of our methodology - Market capitalisation



Source: Goldman Sachs Global Investment Research

This is clearly not an outcome likely to be replicated in practice; however, it does provide a clean starting point for assessing potential combinations financially. In practice, any premium offered would be informed by management's due diligence on the remaining 5 sets of assumptions — cost/revenue attrition, restructuring charges, badwill "creation", PPA, required capitalisation — as well as factors that cannot be gauged externally (e.g., scope for disposals of smaller businesses/geographies within the group; scope for disposals of assets; unwind of JVs/distribution agreements, etc). As such, a range of outcomes exists beyond those presented in our analysis.

⑥ Example: Hypothetical acquisition of CBK by DBK: at current market value, 100% stake acquisition

As for all combinations in our analysis, we assume that Deutsche Bank would acquire a 100% stake in Commerzbank at the current market price. Given the last close of CBK was €4.54 per share, the consideration for a 100% stake, at current market valuation, would amount to €5.7 bn. Similarly, the share price of Deutsche Bank was €8.15 per share, at the last close, suggesting a market value of €16.8 bn.

Note that the M&A analysis contained herein is for illustrative purposes; we take no view on the likelihood of any specific transaction materialising. Pricing as of Oct. 20.

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Valuation: Incorporating the M&A components

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Our analysis relies on a standardised model which we use to examine all possible combinations between 29 Euro area banks under our coverage. This allows us to examine 406 potential combinations, and screen for those banks whose scores suggest a higher likelihood of involvement in potential combinations, as a target. In this section, we incorporate the M&A component into our price targets, by combining our methodology with our departmental M&A framework used across Goldman Sachs' global coverage. The banks with meaningful price target changes are SABE (+34%), CBK (+29%), SOGN (+17%) and BPM (+9%).

Our global, cross-sector M&A framework: Across our global coverage, we examine stocks using an M&A framework, considering both qualitative factors and quantitative factors (which may vary across sectors and regions) to incorporate the potential that certain companies could be acquired. We then assign an M&A rank as a means of scoring companies under our rated coverage from 1 to 3, with 1 representing high (30%-50%) probability of the company becoming an acquisition target, 2 representing medium (15%-30%) probability and 3 representing low (0%-15%) probability. For companies ranked 1 or 2, in line with our standard departmental guidelines we incorporate an M&A component into our target price. An M&A rank of 3 is considered immaterial and therefore does not factor into our price target, and may or may not be discussed in research.

1 Applying M&A framework to our analysis: Combining attractiveness score to derive M&A ranking

Our analysis relies on a standardised model that we use to examine all possible combinations between Euro area banks under our coverage. This allows us to examine 406 potential combinations, and screen for banks with a more attractive implied outcome. For each of the relevant sets of assumptions we outline in our methodology section, we rank and score potential combinations with geographic overlap > 1/3. We then derive combined scores, from which we determine individual M&A probability. We then rank scores (1 to 10) for all combinations, and derive the banks' individual M&A rankings according to the number of potential combinations ranked in the first half of our sample (30% weighting for an M&A component in our price target), and in the third quartile (15%).

- **Quantitative component:** To determine the M&A ranking, which is consistent with our global coverage framework, we create combined scores for the relevant sets of assumptions we outline in our methodology section. We analyse four main components relating to potential combinations, which rely on our six-step methodology (Exhibit 9):
  - **Assigning scores:**
    - **Cost synergies** (Exhibit 13)**:** We use the cost synergies scores derived from our approach outlined in the methodology section (see: Cost synergies: a range of 0-40%, driven primarily by geographic overlap).

- **Revenue attrition** (Exhibit 17)**:** We use the revenue attrition scores derived from our approach outlined in the methodology section (see: Revenue attrition: from 0% to -3%, as a function of geographic and business mix overlap). Here, however, we reverse scores assigned in our methodology: High revenue attrition is reflected by a low score here.
- **Badwill:** We seek to determine for which combinations the availability of the target's badwill plays an important role in the financing mix of a potential combination. A relatively high percentage of badwill in a combination's financing mix (e.g., as a result of a target's low P/TBV valuation and excess capital vs. required capitalisation) could serve to fund restructuring charges or capital deductions. This translates into a higher score in our framework. We then rank all combinations, and attribute scores ranging from 0 (lower probability) to 10.
- **Market valuation:** We start by calculating the ratio of the acquirer's 2024E standalone P/E to the target's. A positive ratio equates to a relative advantage for the acquirer (as it indicates that the acquirer trades at a P/E premium, which all else equal, allows for relatively lower share issuance), and therefore implies a higher likelihood of a combination. To account for the fact that a valuation advantage is less important when the acquirer is significantly bigger than the target, we multiply this relative P/E ratio by the target's net income relative to the acquirer's. We then rank the results for all combinations, and equally divide them into scores, ranging from 0 (lower probability) to 10.

- **Combining scores:** We combine the four steps above, and derive an overall score for each combination. Our combined synergy scores (also capturing revenue attrition) are weighted at 50% (with the split described below) while our market valuation and badwill scores are each weighted at 25%.
  - The weights of our **cost synergies and revenue attrition scores** are assigned based on their theoretical impact on a potential combination. Under our framework (see Methodology), we estimate that for the "average" combination among the €-banks under our coverage, the earnings impact resulting from cost synergies could account for almost 90% of the combined absolute impacts. Hence, of the 50% weighting that we allocate to cost synergies and revenue attrition, 45% (or 90% of 50%) is allocated to cost synergies scores, while the remainder (5%) is allocated to revenue attrition scores.
  - Combinations where **cost synergies scores are equal to 0** are excluded, as we recognise that the industrial logic for this type of potential combination remains limited in the current environment, and the valuation argument alone is unlikely to trigger consolidation.

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- **Qualitative component: Option to overlay the model output with pragmatic issues.** Purposely, we aim for our analysis to be mechanical. We explain this in detail in the Methodology section. Of course, all potential combinations will incorporate nuances, which can substantially alter the financial outcome. To this end, we introduce a qualitative overlay for combinations which are theoretically attractive/possible, but practically less so. For example, combining two G-SIB banks could result in a sharp increase in capitalisation supervisory requirements. Factors such as particular ownership structures and anti-trust issues are some of the other key impediments.
- **Assigning M&A rankings:**
  - We consider the "target" banks with the highest number of potential combinations ranked (by score) in the top 50% of our sample as the most likely M&A candidates, and assign them an M&A rank of 1 (thus an M&A weighting of 30% in our valuation framework).
  - We assign an M&A rank of 2 (thus an M&A weighting of 15%) for banks which: (1) have combinations ranked in the third quartile of our sample (top 50%-75%), (2) should be assigned an M&A rank of 1 but where size or other impediments might make a combination less likely or change its nature, and (3) for which combinations captured within our screen do not reflect the entire scope of possibilities for a given bank.
  - Banks where potential combinations do not feature or rank in the fourth quartile of our sample, or where we see high other (qualitative/ownership/regulatory) impediments, are assigned an M&A rank of 3, which is thus not factored into our price targets.

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1 Assigning M&A component: Example of Banco BPM: M&A rank of 1

- **Quantitative component:** On our analysis, when we screen for BBPM as a potential target, we derive 4 potential combinations ranking in the top 40 combinations of our sample (top half). In more details:
  - **Cost synergies:** The average cost synergies score for BBPM is high, at 9, given high geographic overlap with domestic Italian and two French banks.
  - **Revenue attrition:** The average revenue attrition score for BBPM is low at 1, indicating high attrition.
  - **Badwill:** BBPM trades at c.0.25x 2020 GSe PTBV, implying €6.8 bn of badwill after PPA (see Exhibit 21). BBPM's CET1 ratio (13.3% as of 2Q20) and low valuation implies high capital leeway for a potential acquirer. These elements taken together imply lower share issuance, all else equal, compared to peers with higher valuations or less excess capital. The score average for BBPM for this metric is 8.
  - **Market valuation:** We divide the acquirer's 2024E P/E by BBPM's, weighted for BBPM's net income relative to the acquirer's. The average score derived for the combination involving BBPM is 4.
  - **Combined score:** Weighing the four above-mentioned components yields an average combined score of 7. 4 potential combinations rank in the top 50% scores of our sample.
- **Qualitative component:** We identify no qualitative issues, outside of the scope of our model, which would preclude a hypothetical combination from taking place.
- **M&A component:** Taking both components together, gives us a score of 1, for a 30% M&A weighting in our valuation.

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❷ Assigning value to M&A probability and adding into standalone valuations:

Our M&A valuation is our standalone valuation plus the present value of cost synergies (as a % of each bank's costs – see below), shared at 50% with a hypothetical merger partner as the synergies are calculated as a % of one of the partner's costs, but accrue to both banks. In more detail:

- **Cost synergies:** We use a range of 25-40% and assign individual cost synergies to banks according to their current cost/income ratio (CIR). We assume that a higher (lower) CIR could be a sign of lower efficiency (all things equal), which could be addressed by combining two banks. A high CIR (relative to other banks) is assigned a high score (see section: ① Cost synergies: A range of 0-40%, driven primarily by geographic overlap), which translates into higher assumed cost synergies. We multiply each bank's cost base (2021E) by the assigned cost synergies, net of tax.
- **Present value of synergies:** The present value of cost synergies is obtained by using our discount rate (here equal to COE, given g=0%) used to derive each bank's standalone P/E multiple, then applied to our post-tax cost synergies.
- **Accounting for restructuring charges:** From the PV of cost synergies, we deduct post-tax restructuring charges, calibrated at 1.7x the yearly cost synergies (see section: ④ Restructuring charges: Calibrated at 1.7x cost synergies, in line with historical median).
- **M&A value; combining all steps:** The above steps result in net post-tax synergies, which we share at 50% between target and acquirer. We divide by each bank's number of shares (2021E), to get an M&A value per share.
- **M&A valuation:** Our final step is to add the M&A value/share to our fundamental valuation to get the M&A valuation.

❷ Assigning M&A value: Example of BBPM.

- **Cost synergies:** BBPM's 2020E CIR of 63% is around the median of our 29 €-zone banks sample, and is assigned a score of 5 in our methodology (see: ① Cost synergies: A range of 0-40%, driven primarily by geographic overlap). This score places BBPM in the third quartile of banks which screen for likely M&A in step ❶: "Applying M&A framework to our analysis". BBPM gets assigned a 30% cost synergies component.
- **Present value of synergies:** At 13.5% COE, the NPV of BBPM's 30% cost synergies is ~€3.8bn.
- **Accounting for restructuring charges:** A 1.7x cost synergies, the restructuring charge would be equal to ~€0.9bn.
- **M&A value; combining all steps:** Shared at 50% between potential target and acquirer, the ~€2.9bn net M&A value, equates to €0.96/share.
- **M&A valuation:** Our final step is to add the M&A value/share to our fundamental valuation of €1.58, to get an M&A valuation of €2.54.

Exhibit 26: Our valuation methodology incorporates an M&A component, weighted at 15%/30% of our new target prices
€/share, unless otherwise specified.

	€-zone coverage																												
	BMPS	BPER	SABE	BPM	CBK	UCG	SOGN	BCP	ABN	BKT	BAWG	ING	BBVA	CNAT	ALB	BOP	RBI	NBG	CAGR	CABK	ERST	KBC	BNP	DBK	ISP	SAN	EURB	BOI	AIB
M&A Ranking	1	1	1	1	1	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
M&A Weighting, %	30%	30%	30%	30%	30%	15%	15%	15%	15%	15%	15%	15%	15%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Standalone Valuation	€0.93	€1.88	€0.32	€1.58	€5.59	€11.80	€16.15	€0.12	€10.83	€4.63	€40.57	€10.13	€3.35	€2.90	€1.34	€1.10	€16.60	€1.94	€12.20	€2.31	€27.70	€61.00	€54.00	€7.00	€2.15	€3.15	€0.63	€1.95	€1.70
Cost Synergies, %	40%	35%	30%	30%	40%	30%	40%	25%	30%	25%	25%	30%	25%	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Synergies, per share	€1.95	€1.04	€0.38	€0.96	€5.40	€3.32	€18.92	€0.03	€4.05	€0.72	€3.80	€2.14	€0.94	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
M&A Valuation	€2.89	€2.91	€0.70	€2.54	€10.99	€15.13	€35.08	€0.15	€14.88	€5.35	€44.38	€12.27	€4.29	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Old PT	€1.50		€0.32	€1.70	€5.60	€11.80	€16.20	€0.15	€11.00	€4.63	€41.00	€10.25	€3.35	€2.90	€1.34	€1.10	€16.60	€1.94	€12.20	€2.31	€27.70	€61.00	€54.00	€7.00	€2.15	€3.15	€0.63	€1.95	€1.70
New PT	€1.50	€2.20	€0.43	€1.85	€7.20	€12.30	€19.00	€0.12	€11.40	€4.73	€41.00	€10.50	€3.49	€2.90	€1.34	€1.10	€16.60	€1.94	€12.20	€2.31	€27.70	€61.00	€54.00	€7.00	€2.15	€3.15	€0.63	€1.95	€1.70
% Change	0%	--	34%	9%	29%	4%	17%	-20%	4%	2%	0%	2%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PT Upside / Downside	30%	69%	53%	11%	58%	74%	51%	56%	54%	37%	22%	63%	44%	38%	160%	8%	26%	85%	64%	36%	54%	37%	63%	-14%	36%	85%	90%	6%	84%
Current P/TBV (2020 GSe)	0.20x	0.23x	0.15x	0.25x	0.22x	0.31x	0.23x	0.20x	0.38x	0.69x	0.95x	0.47x	0.41x	0.51x	0.10x	0.09x	0.38x	0.20x	0.52x	0.48x	0.58x	1.03x	0.45x	0.36x	0.62x	0.45x	0.25x	0.24x	0.22x
Standalone Valuation P/TBV (2020 GSe)	0.17x	0.33x	0.17x	0.24x	0.28x	0.51x	0.30x	0.31x	0.56x	0.92x	1.15x	0.73x	0.56x	0.70x	0.27x	0.09x	0.48x	0.38x	0.86x	0.65x	0.89x	1.41x	0.74x	0.31x	0.84x	0.83x	0.48x	0.25x	0.40x
M&A Valuation P/TBV (2020 GSe)	0.51x	0.51x	0.37x	0.39x	0.54x	0.66x	0.65x	0.40x	0.77x	1.06x	1.26x	0.89x	0.72x	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
New PT P/TBV (2020 GSe)	0.27x	0.39x	0.23x	0.28x	0.36x	0.53x	0.35x	0.32x	0.59x	0.94x	1.16x	0.76x	0.59x	0.70x	0.27x	0.09x	0.48x	0.38x	0.86x	0.65x	0.89x	1.41x	0.74x	0.31x	0.84x	0.83x	0.48x	0.25x	0.40x

Our price target revisions for BMPS (overall price target unchanged), BCP and ABN include other changes, and do not only reflect the changes related to our M&A valuation framework.

Source: Factset, Goldman Sachs Global Investment Research

Note: prices in this report are based on the market close as of October 20, 2020

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Valuation and risks

- **ABN (Buy):** In a parallel report, we make further changes to our forecasts and analyse in more detail ABN's ability to sustain high capital returns to shareholders. Given c.55% upside to our 12M price target (€11.4) vs. a median of 37% for our European banking sector coverage, we upgrade ABN to Buy from Neutral. With this report, we adjust our valuation to incorporate our M&A framework, and introduce an M&A component at a 15% weighting in our price target. We also assign ABN an M&A rank of 2 (from 3). Our ROTE/COE-based 12-month price target increases to €11.4 (from €11.0). Our price target incorporates a standalone ROTE/COE-based fundamental value of €10.83/share weighted at 85%, and an M&A value of €14.88/share, weighted at 15%. Key downside risks to our view and price target relate to a deterioration in the operating environment, in particular regarding surprises on cost of risk, as well as AML/KYC, which could impact further capital distribution. Further downside risks are linked to top-line developments, in particular lower margins and volume trends, as well as fee income developments, which could hinder the group's ability to meet its cost/income target. The timeliness and earnings change associated with the non-core CIB wind-down, which could be longer than anticipated and consume more capital than currently forecast, are also downside risks. Politics and adverse regulatory changes, which could change ABN's capital requirements or capacity to return capital to shareholders, are also considerations.
- **BAWG (Neutral):** We adjust our valuation to incorporate our M&A framework, and introduce an M&A component at a 15% weighting in our price target. We also assign BAWG an M&A rank of 2 (from 3). Our ROTE/COE-based 12-month price target remains unchanged at €41.0. Our price target incorporates a standalone ROTE/COE-based fundamental value of €40.57/share weighted at 85%, and an M&A value of €44.38/share, weighted at 15%. We remain Neutral rated. Key risks to our view and price target relate to the length and severity of economic slowdown, impacting asset quality, growth and margins, as well as the group's ability to execute on restructuring. Further risks relate to the ability to deploy excess capital via buybacks, bolt-on M&A and special dividends. Litigation risks (including an ongoing case involving the City of Linz), bank taxes, and the impact of regulations and policies are also key risks.
- **BBPM (Neutral):** We downgrade BPM to Neutral from Buy in a separate note published today. We adjust our valuation to incorporate our M&A framework, and keep an M&A component, now weighted at 30% (vs. 15% previously) in our price target. We also assign BBPM an M&A rank of 1 (from 2). Our ROTE/COE-based 12-month price target is €1.85 (from €1.70). Our price target incorporates a standalone ROTE/COE-based fundamental value of €1.58/share (unchanged) weighted at 70%, and an M&A value of €2.54/share, weighted at 30% (previously €2.41). Key risks to our investment view, forecasts and price target are worse/better NIM, loan growth, credit quality, or cost control. Unforeseen changes to the sovereign, macroeconomic, asset quality and regulatory environment are also risks.
- **BBVA (Buy):** We are Buy rated on BBVA. With this note, we adjust our valuation to incorporate our M&A framework, and introduce an M&A component at a 15% weighting in our price target. We also assign BBVA an M&A rank of 2 (from 3). Our ROTE/COE-based 12-month price target increases to €3.49 from €3.35. Our price target incorporates a standalone

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ROTE/COE-based fundamental value of €3.35/share weighted at 85%, and an M&A value of €4.29/share, weighted at 15%. Key downside risks to our investment view, forecasts and price target include: (1) materialisation of the "adverse" case from our scenario analysis (see here); (2) any financial/reputational/other impact(s) from any ongoing investigations in Spain or elsewhere; (3) a material increase in macro and geopolitical risks in Turkey and/or Mexico; (4) persistent EUR appreciation vs. USD/MXN; and (5) an increase in the correlation of European and LatAm business cycles.

- **BCP (Neutral):** We adjust our valuation to incorporate our M&A framework, and introduce an M&A component at a 15% weighting in our price target. We also assign BCP an M&A rank of 2 (from 3). We note that the current shareholder structure, which includes a large shareholder, makes any potential M&A less likely in our view. Beside this, our changes in our price target have the following moving parts: (1) We increase our COE by 100bp to 15% and (2) we value the bank on a two-year period (2021-22E) vs. four years before (2021-24E); The former is driven by the incrementally more challenging macro outlook, and the latter by an increased volatility of revenue streams, which reduces forecasting visibility. We also (3) hike our assumed CET1 hurdle by 50 bp to 12.5%, broadly in line with Iberian banks under our coverage, to again reflect a tougher macro opportunity set. For all factors, uncertainties around NPL formation, FX mortgage litigation in Poland, and general macro conditions remain a feature. All in, our ROTE/COE-based 12-month price target decreases to €0.12 (from €0.15). Our price target incorporates a standalone ROTE/COE-based fundamental value of €0.12/share weighted at 85%, and an M&A value of €0.15/share, weighted at 15%. We remain Neutral rated. Key risks to our investment view, forecasts and price target include: (1) better/worse-than-expected macro trends in Portugal (as well as the Eurozone in general), Poland and Mozambique; (2) stronger/weaker-than-expected capital formation; (3) lower/larger-than-expected legal costs re FX mortgages in Poland.
- **BKT (Neutral):** We adjust our valuation to incorporate our M&A framework, and introduce an M&A component at a 15% weighting in our price target. We also assign BKT an M&A rank of 2 (from 3). Our ROTE/COE-based 12-month price target increases to €4.73 from €4.63. Our price target incorporates a standalone ROTE/COE-based fundamental value of €4.63/share weighted at 85%, and an M&A value of €5.35/share, weighted at 15%. We remain Neutral rated. Key risks to our investment view, forecasts and price target include: (1) materialisation of the "benign"/"adverse" case from our scenario analysis (see here); (2) better-/worse-than-expected NIM, loan growth, credit quality and/or cost control, as well as macroeconomic conditions in Spain and Portugal; (3) value-accretive/destructive M&A; (4) lower/higher political/policy risks in Spain and abroad; and (5) mortgage-related legal risks in Spain.
- **BMPS (Neutral):** We now value the bank on a three-year period (2022-24E) vs. two years used previously (2023-24E) as now we estimate a positive value per share in 2022E as well on the back of higher capital forecasts. We keep an M&A component at a 30% weighting in our price target, and we continue to assign BMPS an M&A rank of 1. Our ROTE/COE-based 12-month price target remains unchanged at €1.50. Our price target incorporates a standalone ROTE/COE-based fundamental value of €0.93/share weighted at 70% (previously €0.94), and an M&A value of €2.89/share, weighted at 30% (previously €2.74). We remain Neutral rated. Key risks to our investment view, forecasts

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and price target include better or worse asset quality trends, macroeconomic and political risks, worsening or improving NIM, and better or worse cost control.

- **BPER (Buy):** We reinstate our rating at Buy in a separate note published today. In our valuation, we incorporate our M&A framework, with an M&A component at a 30% weighting in our price target. We also assign BPER an M&A rank of 1. Our ROTE/COE-based 12-month price target is €2.20. Our price target incorporates a standalone ROTE/COE-based fundamental value of €1.88/share weighted at 70%, and an M&A value of €2.91/share, weighted at 30%. Key downside risks to our view and price target include worse asset quality trends, which could result in a deterioration of the bank's risk profile and profitability, and in future risk-weighted assets inflation. Worsening NIM and worse cost control, which could entail lower returns, lower capital build-up and lower earnings distribution policy, are also downside risks. Downside risks also include macroeconomic risks, notably a worsening of the COVID crisis in terms of reduced economic activity beyond what we already factor in.
- **CBK (Neutral):** We adjust our valuation to incorporate our M&A framework, and introduce an M&A component at a 30% weighting in our price target. We also assign CBK an M&A rank of 1 (from 3). Our ROTE/COE-based 12-month price target increases to €7.20 from €5.60. Our price target incorporates a standalone ROTE/COE-based fundamental value of €5.59/share weighted at 70%, and an M&A value of €10.99/share, weighted at 30%. We remain Neutral rated. Key risks to our view and price target include better- or worse-than-expected macroeconomic and asset quality trends in Germany and Europe, changes in Euro area monetary policy, regulatory changes and litigation.
- **ING (Buy, on CL):** We adjust our valuation to incorporate our M&A framework, and introduce an M&A component at a 15% weighting in our price target. We also assign ING an M&A rank of 2 (from 3). Our ROTE/COE-based 12-month price target increases to €10.5 (from €10.25). Our price target incorporates a standalone ROTE/COE-based fundamental value of €10.13/share weighted at 85%, and an M&A value of €12.27/share, weighted at 15%. We remain Buy rated (on CL). Key downside risks to our view and price target relate to deterioration in the operating environment, in particular regarding negative surprises on cost of risk and top-line headwinds; disappointing progress on the implementation of the group's strategic initiatives and a weaker outlook for operating expenses; slower-than-expected progress on capital build-up and lower capital distribution. AML, politics and adverse regulatory changes across key markets could also be a consideration.
- **SABE (Neutral):** We adjust our valuation to incorporate our M&A framework, and introduce an M&A component at a 30% weighting in our price target. We also assign SABE an M&A rank of 1 (from 3). Our ROTE/COE-based 12-month price target increases to €0.43 from €0.32. Our price target incorporates a standalone ROTE/COE-based fundamental value of €0.32/share weighted at 70%, and an M&A value of €0.70/share, weighted at 30%. We remain Neutral rated. Key risks to our investment view, forecasts and price target include: (1) materialisation of the "benign"/"adverse" case from our scenario analysis (see here); (2) better-/worse-than-expected NIM, loan growth, credit quality and/or cost control, favourable/adverse FX movements (GBP), as well as macroeconomic conditions across Spain and UK; (3)

value-accretive/destructive M&A; (4) potential litigation costs/fines following difficulties during the IT migration at TSB in the UK; (5) political risks in Spain/UK and abroad; and (6) mortgage-related legal risks in Spain.

- **SOGN (Neutral):** We adjust our valuation to incorporate our M&A framework, and introduce an M&A component at a 15% weighting in our price target. We also assign SOGN an M&A rank of 2 (from 3). Our ROTE/COE-based 12-month price target increases to €19.00 from €16.20. Our price target incorporates a standalone ROTE/COE-based fundamental value of €16.15/share weighted at 85%, and an M&A value of €35.08/share, weighted at 15%. We remain Neutral rated. Key risks to our view and price target include better or worse: CEE/France macro trends, capital requirements, credit quality, capital markets and regulatory headwinds.
- **UCG (Buy, on CL):** We adjust our valuation to incorporate our M&A framework, and introduce an M&A component at a 15% weighting in our price target. We also assign UCG an M&A rank of 2 (from 3). Our ROTE/COE-based 12-month price target increases to €12.30 from €11.80. Our price target incorporates a standalone ROTE/COE-based fundamental value of €11.80/share weighted at 85%, and an M&A value of €15.13/share, weighted at 15%. We remain Buy rated (on CL). Key downside risks to our investment view and price target are worse-than-expected NIM, loan growth, credit quality, value-dilutive M&A or worse cost control; unforeseen negative changes to the sovereign, macroeconomic, asset quality and regulatory environment are also risks.

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Appendix: ECB's public consultation on consolidation an important step forward

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On July 1, 2020, the ECB launched a public consultation on its supervisory approach to consolidation and published a guide on the supervisory approach to consolidation in the banking sector.

If adopted, the guide would represent an important step forward, in our view, as it would provide greater predictability on the supervisory response to a consolidation, share the common objective (with shareholders) of improved profitability and sustainability and allow for an early feedback loop on any potential combinations.

❶ **It provides greater transparency and predictability** on supervisory actions in relation to consolidations. Of particular relevance here are:

1. **Capital requirements**, with the starting point for the combined entity being required to meet the weighted average of the two banks' P2R and P2G prior to consolidation.

   Upward adjustments are possible in case of insufficient improvement in risk profile or if the combination is subject to significant execution risks (e.g., complex IT integration).

   Downward adjustments are possible in case the combination improves the resilience and risk profile of the combined entity, e.g., through diversification effects, reduced dependency on sovereign country exposures and cost-cutting scope.
2. **Recognition of badwill**, with the ECB in principle allowing such recognition and expecting it to be used to increase the sustainability of the business model, e.g., by increasing provisions on NPLs and/or covering integration and combination costs or other investments. Such gains however should not be distributed to shareholders until the sustainability of the combined entity's business model is established.
3. **Temporary use of internal models**, subject to a strong rollout plan of new models. The ECB may temporarily allow the new combined entity to use internal models that were in place before the combination. This would prevent the new entity from seeing volatility in risk-weighted assets and a reduction in risk sensitivity resulting from a temporary reversion to the standardised approach.

❷ **Shared objective of higher profitability and sustainability.** Interests of shareholders and the regulator here appear to be aligned, with the ECB stating that consolidation may help Euro area banks achieve economies of scale, become more efficient and improve their capacity to face new challenges such as digitalisation. The profitability and sustainability of banks' business models are among the ECB's supervisory priorities for 2020, and are important for increasing the resilience of banks and their capacity to service the economy, including in the context of the COVID-19 pandemic. The key focus here will likely be on to what extent combinations might result in lower P2R and P2G requirements, as such a reduction could be a

potential offset to higher D-SIB or G-SIB requirements.

❸ **Early involvement**, with the ECB asking to be involved before any market communication or announcement is made, with the aim to provide preliminary feedback. The ECB proposes to be provided with a robust, credible group-wide integration plan so that it can carry out an accurate and thorough preliminary assessment of a proposed combination.

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Exhibit 27: The ECB has laid out its framework and the principles it follows in assessing its supervisory approach towards sector consolidation
ECB's guide on the supervisory approach to consolidation in the banking sector

	Stage 1 Early Communication	Stage 2 Application	Stage 3 Implementation
Process	• Parties involved encouraged to liaise with ECB before publicly informing market participants • Involved parties expected to present the key characteristics of the proposed business to ECB • Banks expected to provide a robust, credible and informative firmwide or group-wide integration plan • ECB will provide feedback to the involved parties on the supervisory approach	• Involved parties submit the formal application for business combination • ECB takes a decision on whether or not to object to the notified project • A positive outcome of the application triggers the implementation phase	• Consolidation expected to progress in line with integration plan in a sustainable manner • Supervisory response expected in case of materialisation of execution risks (e.g. delays)
	Focus #1 Sustainability of Business Model	**…continued Sustainability of Business Model**	**Focus #2 Risk Management**
Supervisory Expectations	**A credible and comprehensive business plan:** • Is based on conservative assumptions and is consistent with economic assumptions forming baseline and and at least one adverse scenario • Explains BS and P&L projections of the combined entity, its business structure and strategy • Defines ST and LT targets and gives details on the roadmap and timeline to achieve those targets • Establishes compliance with reg. requirements (e.g. P2R and P2G) and macroprudential buffers	**ECB Banking Supervision will look into:** • Plausibility of the assumptions including those related to the external environment • Valuation of assets, which is expected to remain consistent with performance of past transactions • Assumptions related to the costs and synergies liquidity and funding structure • Integration plan, including roll-out plan with due consideration of IT integration issues	**It is expected that:** • A strong leadership team is in place with a proven track record in banking, M&A, and risk management • Clear allocation of responsibilities and decision-making processes for the new group structure • The plan should be closely monitored by both the management and the supervisory functions • Consolidation plan should articulate governance of IT integration given its importance
	Focus #1 P2R / P2G	**Focus #2 Badwill**	**Focus #3 Internal Models**
Key Prudential Aspects	• P2R / P2G for combined entity will be weighted average of two entities prior to the transaction • This starting point can be adjusted upwards or downwards on a case-by-case assessment • Ex post capital requirements should be clarified during the application process to provide stability • Lower P2R / P2G could be seen in case of improvement of combined entity's risk profile	• In principle, ECB recognises duly verified badwill from a prudential perspective • It expects it to be used to increase sustainability of business model (e.g. increase NPL coverage, cover transaction or integration costs) • Profits from badwill should not be distributed to shareholders until sustainability of the business model is established	• ECB acknowledges that there will be a limited period in which involved banks might continue to use internal models that were in place before the merger • Aim is to avoid an unnecessary supervisory burden linked to undue volatility in risk-weighted assets

Source: ECB, Goldman Sachs Global Investment Research

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Appendix: European banking M&A volumes have been stubbornly low since the start of the GFC

M&A across the European banking landscape has been scarce over the last decade, with the value of completed combinations falling from a peak of €145 bn in 2007 to less than €20 bn p.a. since 2011 (according to Dealogic data), and a record low of c.€5 bn in 2019. Since the GFC, combinations have slowly declined, both in volumes and value. Between 2000 and 2009, an average of 85 combinations took place every year; over the last decade this has fallen to 46 combinations per year on average. While 83 combinations took place in 2010, this number has since decreased every year and reached 24 in 2019 (31 in 2018). The total value of deals in the sector has seen the same trend, with ~€63 bn per year on average between 2000 and 2009 versus €15 bn per year between 2010 and 2019.

We also note that, in recent years, most deals have concerned ancillary businesses rather than consolidated groups. In the €-area, the last deals at the parent level were between Intesa SanPaolo and UBI Banca in 2020, Unipol Banca and BPER Banca in 2019, Banco Santander and Banco Popular in 2017, and Banco Popolare and BPM in 2016.

Moreover, the composition of deals has also shifted substantially, with cross-border and €-area focused deals now constituting a smaller fraction of deals. Between 2004 and 2008, more than 55% of deals were cross-border. Since 2009, the proportion of cross-border deals has declined to 40% over the period. Similarly, the shares of non €-area and EM deals has risen, with €-area deals accounting for only 23% of combinations in value over 2017-19.

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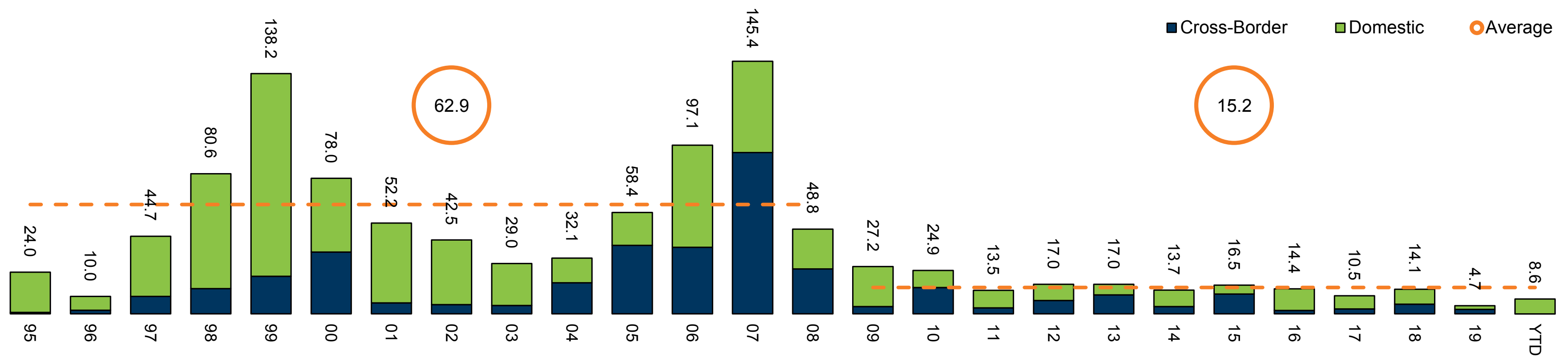
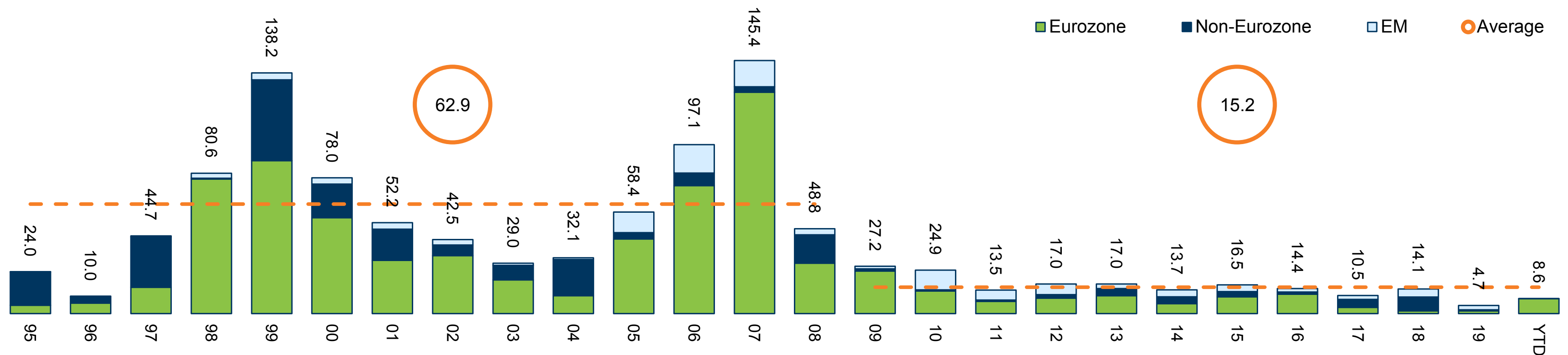
Exhibit 28: M&A across European banking landscape has been scarce over the last decade...
Value of completed combinations (€ bn); split per deal type



Deals for which information is available

Source: Dealogic, Data compiled by Goldman Sachs Global Investment Research

Exhibit 29: ...with the value of completed combinations falling from a peak of €145 bn in 2007 to less than €20 bn p.a. since 2011...
Value of completed combinations (€ bn); split by region



Deals for which information is available

Source: Dealogic, Data compiled by Goldman Sachs Global Investment Research

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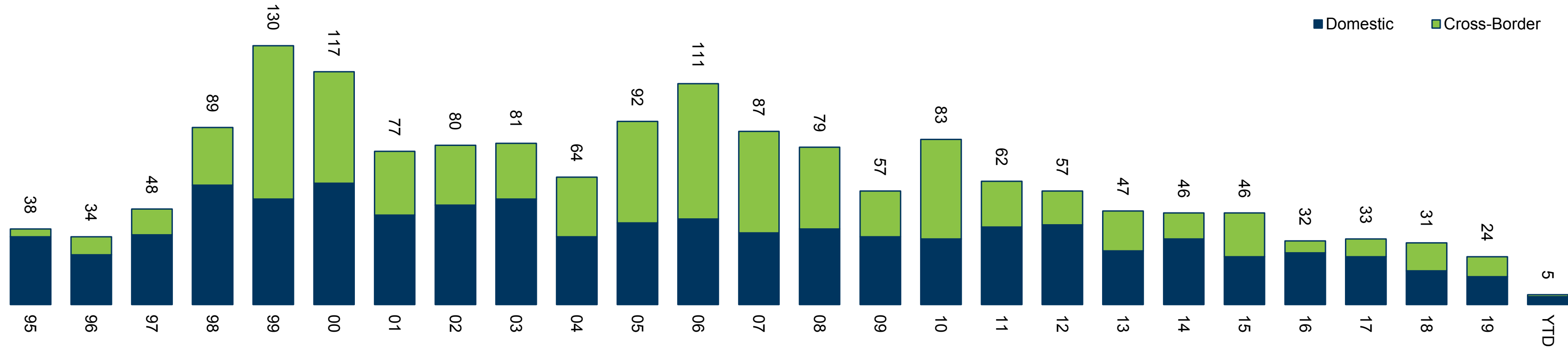
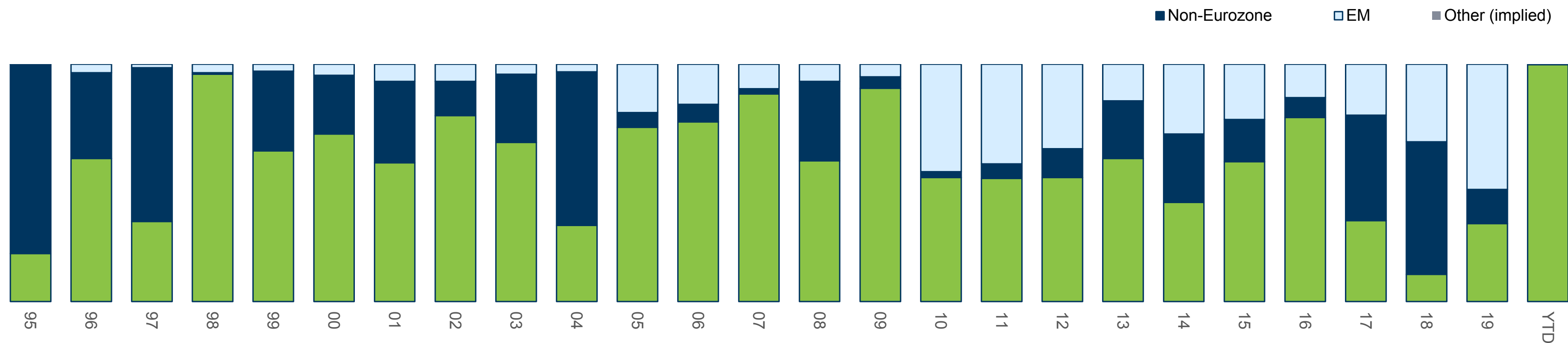
Exhibit 30: ... and the number of combinations reaching historical lows in recent years
Number of completed combinations



Deals for which information is available

Source: Dealogic, Data compiled by Goldman Sachs Global Investment Research

Exhibit 31: Composition of deals has also shifted substantially, with cross-border and €-area focused deals now constituting a much smaller fraction
Composition of completed combinations (by volume)



Deals for which information is available

Source: Dealogic, Data compiled by Goldman Sachs Global Investment Research

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Appendix: Cost/Income ratios suggest further room for rationalisation

As highlighted during our European Financials Conference, both policymakers and banks' management argue that the European banking sector remains highly fragmented. At the same time, while revenues have remained stable and asset productivity has improved, asset margins have fallen. Efficiency (cost/income) ratios have therefore shown little improvement over the past decade. This might suggest that standalone cost programmes could be insufficient to improve the sector's returns, should asset margin continue to deteriorate or not materially improve.

❶ **Costs have grown overall in the last decade.** For the 55 banks under our coverage, costs have grown 4% in absolute terms (in €) between 2009 and 2019. This represents c.0.4% growth/annum (Exhibit 32). While costs have shrunk notably in Spain and Italy, they have grown significantly for French, German and Benelux banks over the last decade.

❷ **Asset productivity has improved.** Over the last decade, Exhibit 33 shows that European banks have reduced costs/assets from a 1.70-1.75% high in 2009-2010, to c.1.6% in 2019.

❸ **Asset margins have fallen as rates got lower.** Ahead of the September 2019 deposit facility rate cut and tiering mechanism introduction, we had shown in detail how we reduced our NII estimates year after year, since the introduction of negative rates by the ECB in 2014. With total assets and loans growing 4% and 8% respectively since 2009, but revenues stable (down 1%), asset margins (on total revenues) have fallen.

❹ **Cost/income ratios are at the same level as 10 years ago.** We show in Exhibit 34 that the average cost/income ratio was at 60% in 2009 and 2019, and that it has been in the range of 60%-63% in the last decade.

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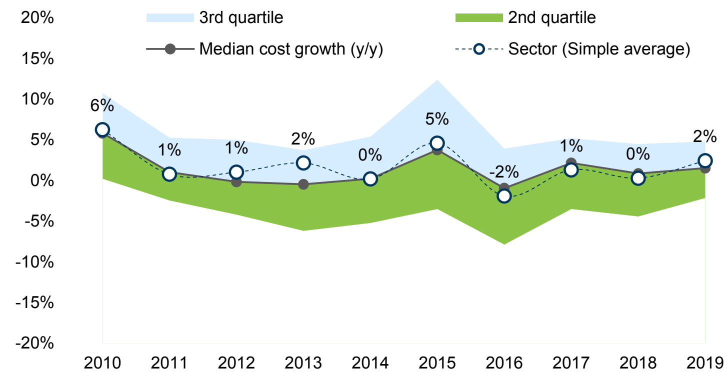
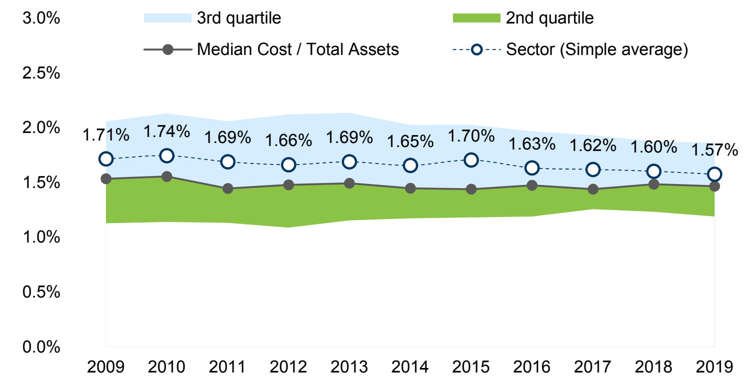
Exhibit 32: European banks have grown costs at c.0.5% p.a. over the last decade...
Cost growth (p.a.) 2009-2019; sample of European banks under GS coverage



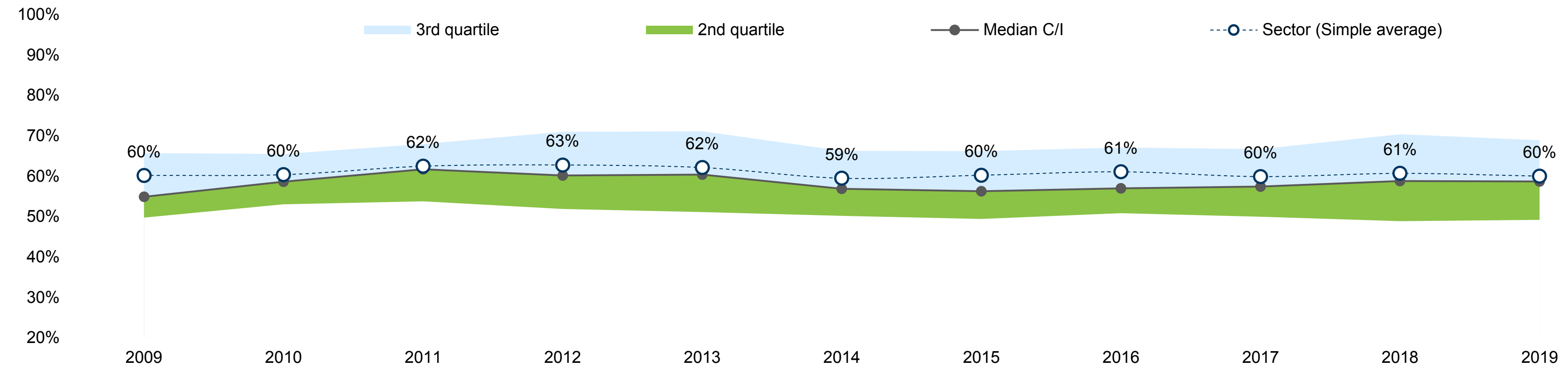
Source: S&P Global Market Intelligence, Company data, Goldman Sachs Global Investment Research

Exhibit 33: ... while showing improving asset productivity...
Costs as % total assets 2009-2019; sample of European banks under GS coverage



Source: S&P Global Market Intelligence, Company data, Goldman Sachs Global Investment Research

Exhibit 34: ...but no improvement in cost/income ratios over the last decade
C/I ratios 2009-2019; sample of European banks under GS coverage



Source: S&P Global Market Intelligence, Company data, Goldman Sachs Global Investment Research

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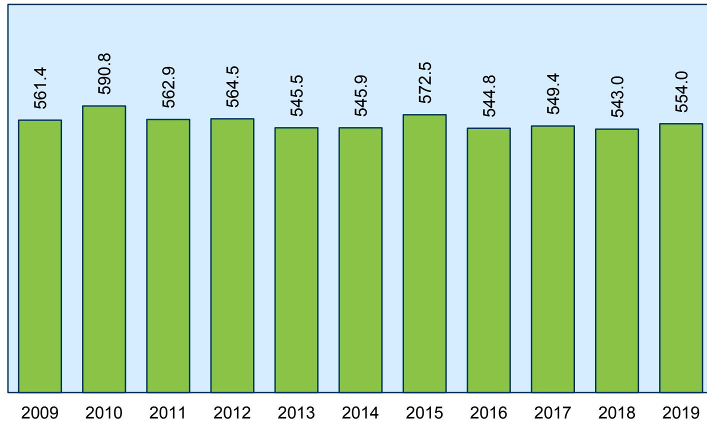
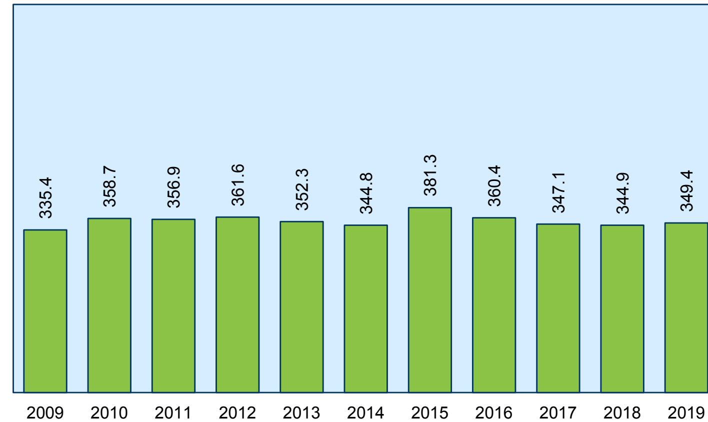
Exhibit 35: Aggregate revenues have remained broadly stable despite balance sheet expansion...
Aggregate revenues 2009-2019; sample of European banks under GS coverage. €bn



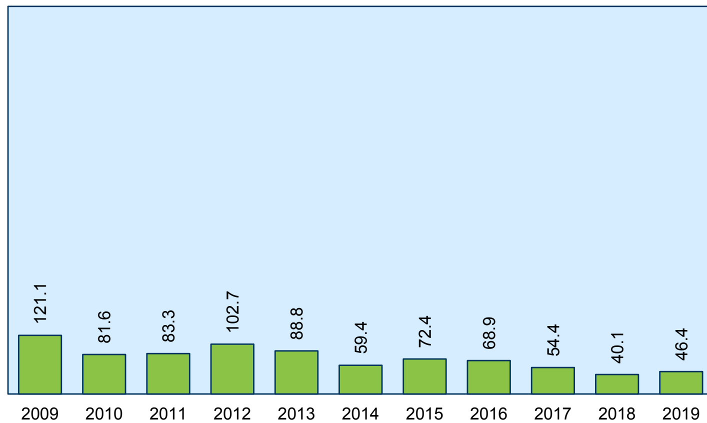
Source: S&P Global Market Intelligence, Company data, Goldman Sachs Global Investment Research

Exhibit 36: ...and so have costs...
Aggregate costs 2009-2019; sample of European banks under GS coverage. €bn



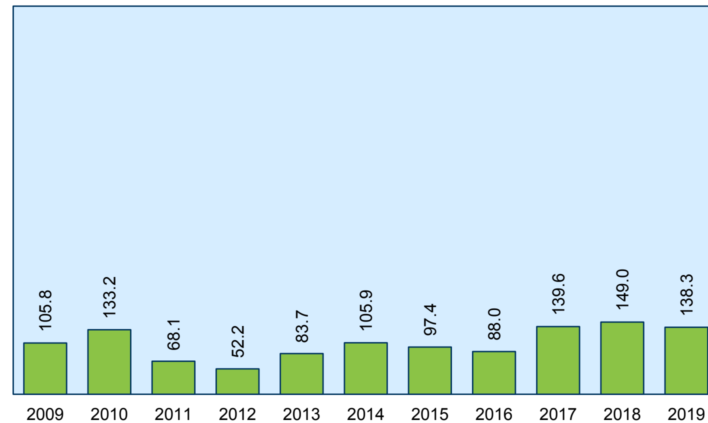
Source: S&P Global Market Intelligence, Company data, Goldman Sachs Global Investment Research

Exhibit 37: ...while LLPs have been trending lower through the cycle...
Aggregate LLPs 2009-2019; sample of European banks under GS coverage. €bn



Source: S&P Global Market Intelligence, Company data, Goldman Sachs Global Investment Research

Exhibit 38: ...resulting in a moderate uptick in pre-tax profitability
Aggregate PBT 2009-2019; sample of European banks under GS coverage. €bn



Source: S&P Global Market Intelligence, Company data, Goldman Sachs Global Investment Research

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Rating and pricing information

ABN ABN Amro Group (Buy, €7.38), BAWAG Group (Neutral, €33.58), BBVA (Buy, €2.43), BNP Paribas (Buy, €33.12), BPER Banca (Buy, €1.30), Banca Monte dei Paschi di Siena (Neutral, €1.15), Banco BPM SpA (Neutral, €1.67), Banco Comercial Portugues (Neutral, €0.08), Banco Sabadell (Neutral, €0.28), Banco Santander (Buy, €1.70), Bankinter (Neutral, €3.45), Barclays Plc (Neutral, 104.32p), Commerzbank AG (Neutral, €4.54), Credit Agricole SA (Buy, €7.44), Credit Suisse (Buy, SFr9.86), Deutsche Bank (Neutral, €8.15), HSBC (Buy, 308.55p), ING Groep NV (Buy, €6.45), KBC Group (Buy, €44.58), Societe Generale (Neutral, €12.61), Standard Chartered (Buy, 380.6p), UBS Group (Buy, SFr11.22) and UniCredit (Buy, €7.06). As of October 20, 2020.

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Disclosure Appendix

Reg AC

We, Jernej Omahen, Jean-Francois Neuez, Anna Marshall, Thomas Dewasmes, CFA, Alexandre Dupuy and Gabriele Poy, hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

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Growth is based on a stock's forward-looking sales growth, EBITDA growth and EPS growth (for financial stocks, only EPS and sales growth), with a higher percentile indicating a higher growth company. **Financial Returns** is based on a stock's forward-looking ROE, ROCE and CROCI (for financial stocks, only ROE), with a higher percentile indicating a company with higher financial returns. **Multiple** is based on a stock's forward-looking P/E, P/B, price/dividend (P/D), EV/EBITDA, EV/FCF and EV/Debt Adjusted Cash Flow (DACF) (for financial stocks, only P/E, P/B and P/D), with a higher percentile indicating a stock trading at a higher multiple. The **Integrated** percentile is calculated as the average of the Growth percentile, Financial Returns percentile and (100% - Multiple percentile).

Financial Returns and Multiple use the Goldman Sachs analyst forecasts at the fiscal year-end at least three quarters in the future. Growth uses inputs for the fiscal year at least seven quarters in the future compared with the year at least three quarters in the future (on a per-share basis for all metrics).

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	Rating Distribution			Investment Banking Relationships		
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Global	49%	35%	16%	64%	57%	54%

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Price target and rating history chart(s)

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